

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Communication Studies Theses, Dissertations,
and Student Research

Communication Studies, Department of

8-2012

Changes in narrative sense-making over time: The role of mother-daughter communication during conversations about difficulty

Haley Kranstuber Horstman

University of Nebraska-Lincoln, haley.kranstuber@huskers.unl.edu

Follow this and additional works at: <https://digitalcommons.unl.edu/commstuddiss>



Part of the [Interpersonal and Small Group Communication Commons](#)

Kranstuber Horstman, Haley, "Changes in narrative sense-making over time: The role of mother-daughter communication during conversations about difficulty" (2012). *Communication Studies Theses, Dissertations, and Student Research*. 22.

<https://digitalcommons.unl.edu/commstuddiss/22>

This Article is brought to you for free and open access by the Communication Studies, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Communication Studies Theses, Dissertations, and Student Research by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

CHANGES IN NARRATIVE SENSE-MAKING OVER TIME:
THE ROLE OF MOTHER-DAUGHTER COMMUNICATION DURING
CONVERSATIONS ABOUT DIFFICULTY

by

Haley Kranstuber Horstman

A DISSERTATION

Presented to the Faculty of
The Graduate College at the University of Nebraska
In Partial Fulfillment of Requirements
For the Degree of Doctor of Philosophy

Major: Communication Studies

Under the Supervision of Professor Jody Koenig Kellas

Lincoln, Nebraska

August, 2012

CHANGES IN NARRATIVE SENSE-MAKING OVER TIME:
THE ROLE OF MOTHER-DAUGHTER COMMUNICATION DURING
CONVERSATIONS ABOUT DIFFICULTY

Haley Kranstuber Horstman, Ph.D.

University of Nebraska, 2012

Advisor: Jody Koenig Kellas

The mother-daughter relationship is one of the first and often most important sites for (effective and ineffective) social support in women's lives. Effective mother support helps daughters to make sense of and cope with life's stressors, which leads to improved physical and psychological health. Narrative theorizing suggests that individuals cope with and make sense of their (difficult) experiences through creating and telling stories with others. Likewise, research shows that when individuals' sense-making increases over time, they are likely to experience higher rates of well-being (Pennebaker, 1993). Yet, although narrative meaning-making is largely an interpersonal process (Koenig Kellas, 2005) that often occurs in the mother-daughter dyad (Langellier & Peterson, 1992), little is known about how the quality of mother communication, particularly social support, changes the way daughters narratively make sense of their difficult experiences.

The current dissertation investigated the ways that daughters' narratives of difficulty changed over time and with respect to mother communicated support behaviors. Sixty-two mother-daughter pairs participated in a quasi-experimental, longitudinal study. Grounded in the expressive writing paradigm (Pennebaker, 1993), daughters wrote out their story of difficulty at Time 1, discussed the difficult experience in the social interaction lab with her mother two days later at Time 2, and then wrote their

stories of difficulty two days later at Time 3, and as a follow-up three weeks later at Time 4. Daughters reported on well-being, negative affect, and positive affect during the storywriting times, and perceptions of mother social support after their conversation at Time 2. Daughters' stories were analyzed for narrative sense-making indicators, including narrative coherence, linguistic content, tone, and frame.

Results indicated that cognitive mechanism words, positive tone, and redemptive frames in daughters' narratives predicted well-being change over time, yet often in the opposite direction as hypothesized, and that mothers' empathy, emotional support, perspective-taking, and negative face threats predicted daughters' psychological well-being. Finally, as predicted, mothers' empathy, positive facework, and emotional support predicted increases in daughter positive tone over time, and mothers' use of negative face threats predicted decreases in narrative coherence. Implications for findings, limitations, directions for future research, and potential applications are discussed.

ACKNOWLEDGEMENTS

John Donne famously wrote, “no man is an island.” He must have written a dissertation. I was by no means an island during this process, and so I am blessed to have many people to thank for helping me to earn a Ph.D.

The story of my Ph.D. journey starts at Miami University where Ann Frymier picked me out of her Research Methods class to be her undergraduate assistant. Thank you for seeing promise in me, and for showing me the ropes of academia, Ann. To Jenn Anderson, Jillian Anderson, Danielle Orbach, Judi Weiner, and Erin Zinsmeister, thank you for your support during my Master’s program at Miami.

The next chapter of my academic story was at University of Nebraska-Lincoln. Thank you to my research assistants Lindsey Klug and Alexis Lehman for your hard work in analyzing the narrative data in this project. Julia Torquati, thank you for your guidance on my dissertation, particularly by reminding me to roll with the punches during the process. Thank you to my mentor and teacher Dawn O. Braithwaite for showing me the value of service to the discipline and department, and for instilling in me gratitude for the family we choose. Thank you to Jordan Soliz for always believing in me and for pushing me intellectually to grow from a student to a scholar. Many of your wise words have become enduring memorable messages for me. Jody Koenig Kellas, thank you for inspiring me to work hard to achieve my dreams. Thank you for always being my cheerleader, mentor, teacher, and friend during this process, and for the countless hours you spent brainstorming, reading and helping to edit my dissertation. You’ve shaped my life in important ways and I could never thank you enough.

Thank you to my Lincoln chosen family for all of your support, love, and encouragement during this chapter of our lives. To my cohort, Sarah Wilder, Sai Sato Mumm, Arleen Bejerano, and Scott Church, thank you for riding this Ph.D. wave with me. Thank you to Sarah Wilder for practicing what you preach as a social support scholar. The short ship has arrived, my friend! Thank you to Alysondra Duke for supporting, encouraging, crying, laughing, and dancing with me during our years together in Lincoln. Thank you, Seth, Colleen, and Essie Colaner, for our long nights of talking and laughing about life and family. Tell Ess to call Aunt Haley whenever she needs to talk. Thank you to Amanda and Will Holman for being such supportive and loving friends to Tophe and me. We look forward to many more years of fun and friendship with you. And thank you to my academic sisters – Kristen Carr, Angela Hosek, Christy Rittenour, Allison Thorson, and Erin Willer – for showing me what it means to be excellent scholars and amazing women. Thank you to my life-long friends and family Kate Duncan, Kelly Hesselbaum, Lauren Kuzyk, Lindsey Miller, and Marian Pauli for being my rock for so many years, and many years to come. Thanks, Kelly K., for being proud of your big sister and for showing me what it means to follow your passion.

To my parents, Tom and Cheryl, I can't even begin to thank you for a lifetime of support, love, and encouragement to follow my dreams. Thank you for being my inspiration for studying family communication; I am blessed to have parents who showed me how beautiful families can be. I love you to pieces. Most of all, thank you to my husband, Tophe, for persistently and passionately believing in me. I can't thank you enough for being so encouraging and patient, even when our house was a "glass case of emotion." I love you lots, and I can't wait to write the rest of our story together.

TABLE OF CONTENTS

CHAPTER ONE: RATIONALE FOR CURRENT STUDY

Introduction.....	1
Narrative Theorizing: Making Sense of Difficulty	5
Narrative sense-making: The content of stories.....	8
<i>Narrative coherence</i>	10
<i>Linguistic content</i>	13
<i>Narrative tone</i>	17
<i>Narrative frame</i>	18
<i>Summary</i>	19
Narrative sense-making: The process of storytelling over time	19
<i>The benefits of writing stories of difficulty over time</i>	21
<i>Sense-making change over time</i>	22
<i>Narrative sense-making and cognitive processing</i>	23
<i>Summary</i>	25
Narrative Sense-making through Interpersonal Communication	26
Sense-making through Social Support.....	29
Social support	30
Emotional support.....	32
<i>Empathy</i>	35
<i>Facework</i>	36
<i>Perspective-taking</i>	38
Change in narrative sense-making: Appraisal theory	40
<i>Linking support and sense-making through appraisal theory</i>	42
Sense-making through Mother-Daughter Social Support.....	46
Mother-daughter narrative sense-making and social support	48
Chapter Summary and Hypotheses.....	50

CHAPTER TWO: METHOD

Participants.....	54
Procedures.....	56
Pre-interaction survey	56
Time 1	57
Time 2	57
Time 3	59
Time 4	59
Measures	60
Difficult life experience	60
Social support behaviors	61
<i>Empathy</i>	62
<i>Perspective-taking</i>	62
<i>Facework</i>	63
<i>Social support</i>	63
Well-being.....	64
<i>Mental health</i>	64
<i>Positive and negative affect</i>	65
Data Analysis	66
Narrative coherence	67
Narrative tone and narrative frame	69
Linguistic content.....	71
Chapter Summary	72

CHAPTER THREE: RESULTS

Participant Attrition	73
Hypothesis 1: Narrative Sense-making and Well-Being	75
Time 1	78
Time 3	79
Time 4	79
Summary	81

Hypothesis 2: Mother Social Support and Well-Being.....	81
Positive affect.....	83
Negative affect.....	83
Mental health symptoms	84
Summary	84
Hypothesis 3a: Daughter Narrative Sense-Making over Time	84
Narrative coherence	85
Narrative tone and positive emotion words	86
Negative emotion words	86
Cognitive mechanism words.....	88
Narrative frame	88
Summary	89
Hypothesis 3b: Social Support and Daughter Narrative Sense-Making over Time	89
Narrative coherence	93
Narrative tone.....	93
Linguistic content.....	93
Narrative frame	95
Summary	95
Chapter Summary	95

CHAPTER FOUR: DISCUSSION

Summary and Purpose of Present Dissertation.....	98
Narrative Sense-Making as a Process	100
Narrative sense-making at Time 1	102
Narrative sense-making at Time 3	102
Narrative sense-making at Time 4.....	104
Mother Social Support and Daughter Well-Being.....	108
Mothers' support and daughters' positive affect	108
Mothers' negative face threats and daughters' negative affect.....	109
Mothers' positive face threats and daughters' well-being	110
Interpersonal Communication and Narrative Sense-Making Change	111

Narrative sense-making change over time	112
Mother support predicting narrative sense-making change over time	116
<i>Change in narrative coherence</i>	117
<i>Change in narrative tone</i>	117
<i>Change in linguistic content and frame</i>	118
Implications for linking appraisal theory and narrative sense-making	120
Limitations and Further Directions for Future Research	122
Additional directions for future research	124
Applied applications of current study's findings	127
Conclusion	129
REFERENCES	131
 APPENDICES	
Appendix A: Participant Recruitment Script	148
Appendix B: Participant Contact Emails	150
Appendix C: Participant Informed Consent Form	155
Appendix D: Questionnaire	158
Appendix E: Procedure Script	169
Appendix F: Rater Training Materials: Narrative Codebook	172

LIST OF TABLES

Table	Page
1. Descriptive Statistics for Daughter Well-Being and Mother Support Variables ...	66
2. Descriptive Statistics for Narrative Sense-Making across Time	69
3. Intercorrelations among Narrative Sense-Making Variables.....	77
4. Intercorrelations between Narrative Sense-Making and Well-Being Change	78
5. Beta Weights in Multiple Regression Analysis for Narrative Sense-Making and Well-Being Change over Time.	80
6. Intercorrelations among Mother Social Support and Well-Being at Time 2	82
7. Intercorrelations among Narrative Sense-Making Change over Time (T3-T1) and Mother Social Support Variables	90
8. Narrative Frame Change Coding Scheme and Frequency Analysis	92
9. Bivariate Regression Analyses for Mother Social Support Quality and Narrative Sense-Making Change over Time.....	94
10. Summary of Findings from Hypotheses.	97
11. Example Narrative Coherence Change Over Time (Participant #9D).....	114

LIST OF FIGURES

Figure	Page
1. Mean Differences for Narrative Sense-Making Variables over Time	87
2. Frequency Analyses of Narrative Frame over Time	88
3. Frequencies for Narrative Frame Change Variable over Time (T1-T3).....	92

CHAPTER ONE

RATIONALE FOR CURRENT STUDY

The mother-daughter relationship is considered one of the most influential relationships in a woman's life (Miller-Day, 2004; Tannen, 2006). Mothers and daughters "co-author" each other's life stories, discursively creating the realities of their worlds and their relationships (Miller-Day, 2004). They are often highly involved in each other's lives, communicating frequently about both significant and mundane events (Tannen, 2006). In discussing everyday stressors, mothers and daughters often share stories of their experiences with each other. Langellier and Peterson (1992) explain that storytelling is often central and influential in women's relationships, "Indoors and outdoors, in pairs or small groups, over coffee, over the phone, over the kitchen table and the kitchen sink, women's storytelling flourishes. Whenever and wherever women find they can talk, they tell stories about their experiences" (p. 157).

It may not be surprising that mothers and daughters story their lives together, as narrative scholars assert that people are narrative creatures, packaging their lives in story form in order to make sense of the complexities and struggles of human life (e.g., Bruner, 1990; Koenig Kellas, 2008). Because humans live in and through stories, when individuals face challenging or difficult experiences, they tell stories about them, which helps them process the events (e.g., Pennebaker, 1993; Trees & Koenig Kellas, 2009). Creating stories of difficult experiences allows individuals to make sense of the events by constructing plotlines, settings, characters, and story morals (Koenig Kellas, 2008). Because mothers and daughters turn to each other for social support (Miller-Day, 2004; Trees, 2000), many of the stories they tell each other may be about difficulty or stress,

making such interpersonal storytelling a context ripe for understanding the co-construction of narrative meaning.

Although typically considered cognitively, narrative sense-making, or working to understand one's experiences through the creation and organization of narratives (Koenig Kellas, 2008), occurs through both the content and the process of storytelling (Koenig Kellas, 2005). At the individual level, the *content* of stories of difficulty – including coherence, linguistic content, narrative tone, and frame – offer a window into the coping and well-being of storytellers (Baerger & McAdams, 1999; Chung & Pennebaker, 2012; McAdams, Reynolds, Lewis, Patten, & Bowman, 2001; Pennebaker, 1993). For example, McAdams et al., (2001) found that when individuals framed their life stories as redemptive rather than contaminated, they were more likely to exhibit better overall psychological well-being. Research growing out of narrative psychology on the narrative study of lives (McAdams, 1993, 2001) and the expressive writing paradigm (Frattaroli, 2006; Pennebaker, 1993) ground the study of narrative content in cognitive sense-making and demonstrate links between that sense-making and the narrator's physical and psychological health.

Narrative sense-making, however, is not solely a cognitive or static process. In addition to the content of their narratives, individuals make sense of experiences over time (Pennebaker, 1993), often through the *process* of telling stories to others (Koenig Kellas, 2005). Researchers from the expressive writing paradigm, for example, have established that the way stories change over time is indicative of how storytellers make sense of their experiences (Pennebaker, 1993). Specifically, positive change in linguistic content when writing a story over several days (e.g., an increase in causal words such as

“because”) predicts increased well-being in storytellers (Pennebaker, Mayne, & Francis, 1997; Pennebaker & Stone, 2003). Yet, although research has established the importance of narrative sense-making and change over time, little is known about the factors that contribute to the positive or negative changes in individuals’ narratives. In other words, it is unclear what psychological, cognitive, relational, or communicative qualities and/or processes predict changes in narrative sense-making. The present dissertation posits that interpersonal communication, particularly between mothers and daughters, will help to explain changes in individuals’ narratives over time.

Indeed, stories are constructed in and through interpersonal communication (e.g., Buehlman, Gottman, & Katz, 1992; Koenig Kellas, 2005). The ways in which interlocutors construct narrative meaning is largely based on the collaborative process of storytelling and storylistening (Bavelas, Coates, & Johnson, 2002; Koenig Kellas & Trees, 2006; Trees & Koenig Kellas, 2009) and these processes have also been linked to individual (Koenig Kellas, Trees, Schrodt, LeClair-Underberg, & Willer, 2010) and relational (Buehlman et al., 1992; Koenig Kellas, 2005) well-being. Despite the established links between cognitive and interpersonal narrative sense-making and well-being, less is known about how interpersonal communication may facilitate or stifle the narrative sense-making that may, in turn, promote well-being. Previous research, however, may offer important clues.

Specifically, when discussing stories of difficulty, one type of interpersonal communication likely present is social support (Burleson & Goldsmith, 1998; Folkman, Lazarus, Dunkel-Schetter, DeLongis & Gruen, 1986). Socially supportive behaviors emerge when relational partners express caring, concern, empathy and reassurance of

worth aimed at changing the psychological state or feelings of distressed others, called “emotional support” (e.g., Burleson, 1994; Burleson & Goldsmith, 1998). Support is an important communicative response to individuals’ stories of difficulty because those who receive effective emotional support – such as perspective-taking, empathy and facework – are more likely to exhibit better overall adjustment (Manne, Dougherty, Veach, & Kless, 1999) and lower levels of depression (Edwards & Clark, 2004) than those who receive little or ineffective support. Effective communicated support may be particularly important in mother-daughter interactions given their characteristically close emotional ties and dynamic relationships (Fischer, 1986; Miller-Day, 2004; Tannen, 2006). Although mothers and daughters often exhibit high levels of both effectual and ineffectual emotional support for one another (Derlega, Barbee & Winstead, 1994; Hunter & Youniss, 1982), the mother-daughter relationship is largely understudied in social support research (Gardner & Cutrona, 2004; Trees, 2000).

Overall, high-quality support behaviors are important to relational health and individual well-being; yet, researchers are largely unaware of the cognitive processes individuals use to make sense of their difficult experiences in support contexts (Burleson, 1990). The current study addresses this gap by exploring the mechanisms by which daughters narratively cope with stressors and how narrative coping over time may be affected by the quality of supportive communication during conversations about difficulty with their mothers. Studying narrative change in light of social support processes allows for a greater understanding of the degree to which mothers help or hinder daughters’ ability to narratively cope with their life stressors.

Since narrative research has been critiqued for being atheoretical (e.g., Koenig Kellas, 2005, 2008), an understanding of the process by which supportive communication might change sense-making in distressed individuals can be informed by appraisal theory. Appraisal theory hypothesizes that when individuals are confronted with confusing or difficult experiences, they engage in the appraisal process (Lazarus, 1991, 1999). In so doing, individuals evaluate the potential threat of the situation through appraisals, and then these appraisals shape their emotional reaction to and behaviors surrounding the situation. According to appraisal theorists, distressed individuals seek out social support, wherein they can reflect upon and subsequently reappraise their situations by “talking through” their problems. In appraisal theory, interpersonal communication (through social support) is seen as a conduit to the reappraisal of difficult situations, which leads to better overall well-being and emotional health.

Taken together, narrative theorizing and appraisal theory inform each other on the importance of interpersonal communication in the reappraisal and sense-making process. In the context of discussing difficult situations, narrative theorizing asserts that individuals make sense of their lives through the content and process of creating narratives in and through interpersonal communication (Bruner, 1990; Koenig Kellas & Trees, 2006); appraisal theory claims that interpersonal communication facilitates reappraisal in distressed individuals (Lazarus, 1991, 1999). As such, appraisals are part of the narrative sense-making process – individuals appraise and reappraise their events in and through telling stories. Likewise, because research has shown that the quality of social support predicts reappraisal and improved well-being in the distressed individuals (e.g., Burleson, 1994; Jones & Wirtz, 2006), it is likely that daughter narrative sense-

making will also change based on the quality of her mother's support behaviors because they should help to facilitate (re)appraisal. In this way, appraisal theory serves as a bridge between narrative theorizing and social support.

The present dissertation, therefore, brings together these two bodies of literature – narrative theorizing and social support/appraisal theory – to investigate the ways daughters come to narratively make sense of their difficult experiences through interactions with their mothers. The purpose is to understand the ways in which the content of daughters' narratives changes over time and to investigate the role that mother communication plays in that process over time. Because mothers and daughters frequently discuss their struggles and often provide each other with both competent and incompetent forms of social support, this is a relevant and important dyad to investigate (Gardner & Cutrona, 2004; Miller-Day, 2004; Trees, 2000).

In the remainder of this chapter, I will first discuss principles of narrative theorizing and narrative sense-making relevant to understanding difficulty. Next, I will explain the ways in which social support and appraisal theory adds to an understanding of narrative sense-making processes. Finally, I will propose a series of hypotheses aimed at explaining the process by which daughters' narrative sense-making about a difficult situation might change over time in light of interactions with their mothers.

Narrative Theorizing: Making Sense of Difficulty

Human life is fraught with expected and unexpected stressors. As individuals age, they face developmental stressors such as leaving the home, getting married, having children, launching children, and managing families in later life, as well as unexpected stressors such as illness, a death in the family, and divorce (Galvin, Brommel, & Bylund,

2007). If individuals are unable to effectively cope with their stress, these difficult events may lead to negative outcomes such as depression, psychological symptoms and physical illness (Folkman, et al., 1986; Lazarus & Cohen, 1977; Pennebaker, 1993). However, coping, or a person's efforts to manage the stressors of a specific event deemed as taxing or exceeding one's resources (Folkman et al., 1986; Lazarus & Folkman, 1984), can mitigate the effects of difficult experiences on psychological and physical health.

Researchers in various social scientific fields such as psychology (Lazarus & Folkman, 1984; McAdams, 2001; Pennebaker, 1993), family therapy (White & Epston, 1990), and communication (Burleson & Goldsmith, 1998; Trees & Koenig Kellas, 2009) have contributed to an expansive body of literature that acknowledges the power of narrative in its ability to help individuals to cope with their personal problems. Research on narrative sense-making, or working to understand one's experiences through narrative creation and telling (Koenig Kellas, 2008), shows that narrating difficulty facilitates the process of bringing meaning, direction, and understanding to experiences, which helps people understand and cope with their stressors (e.g., Bochner, Ellis & Tillmann-Healy, 1997; Koenig Kellas, 2008). The present study investigates the ways daughters narratively cope with and make sense of their difficult experiences through storywriting and telling stories to their mothers. The following sections will first explain the importance of investigating the *content* of individuals' narratives of difficulty, and then discuss the necessity of investigating the *process* of creating, re-creating, and telling narratives over time.

Narrative sense-making: The content of stories. People are natural storytellers who narrate their experiences in order to make sense of their lives. Humans are “homo

narrans,” or storytelling beings who author and understand their life events in story form (Fisher, 1987). Narrative theorists (e.g., Bruner, 1990; Labov, 1999) assert that humans bring together their thoughts and emotions through plot, sequence, characters and agency. Such narrative structuring can help facilitate sense-making such that “narrative emplotment helps individuals organize lived events – many of which are messy, multivocal, complicated or confusing – into more manageable packages that make sense of the context of their lives and relationships” (Koenig Kellas, 2008, p. 242).

In an effort to understand the ways individuals use narratives to understand their experiences, researchers have investigated the content of stories, such as story morals or themes (e.g., Kranstuber & Koenig Kellas, 2011; McAdams, 1993; Vangelisti, Crumley & Baker, 1999), meaning-making (McLean & Breen, 2009; McLean & Pratt, 2006), emotion and cognition words used (e.g., Pennebaker & Beall, 1986), narrative coherence or completeness (e.g., Koenig Kellas & Manusov, 2003; LeClair-Underberg, 2008; McAdams, 1993), and narrative tone and framing (e.g., McAdams, 1993; McAdams et al., 2001). Individuals collect, organize, and process the complexities of their life events through the content of their narratives (e.g., Bochner, 2002; Koenig Kellas, 2008) in relation to their larger life story (McAdams, 1993). Thus, the present study will investigate the content of daughters’ stories of difficulty in order to assess one aspect of the ways in which they make sense of and cope with a particular life stressor.

Specifically, based on theoretical and empirical evidence linking them to well-being (Baerger & McAdams, 1999; Chung & Pennebaker, 2012; Koenig Kellas & Manusov, 2003; McAdams, 1993; McAdams et al., 2001), the current dissertation focuses on four content-specific indicators of narrative sense-making – narrative

coherence, linguistic content, narrative tone, and narrative frame – to assess daughters’ sense-making in stories of difficulty. In particular, two well-established bodies of research growing out of narrative psychology– the narrative study of lives (McAdams, 1993, 2001) and the expressive writing paradigm (Pennebaker, 1993) – provide the foundation for the investigation of narrative sense-making content in the current study. Theorizing from the narrative study of lives asserts that story content, particularly coherence, tone, and frame, reflects personal identity and meaning about one’s life (Baerger & McAdams, 1999; McAdams, 1993; McAdams et al., 2001). Thus, the present study will draw from this body of literature to understand how daughters’ narratives reflect meaning-making. Further, the expressive writing paradigm posits that the linguistic content of individuals’ stories of trauma written or told over time reflects cognitive, emotional, and functional sense-making which is, in turn, linked to individual well-being (Frattaroli, 2006; Pennebaker, 1993). The present study therefore also draws upon the principles of expressive writing paradigm to investigate the linguistic content of individuals’ stories of stress.

Taken together, both bodies of literature support the importance of studying the content of narratives. Indeed, Pennebaker et al. (1997) assert that the two most important components of narrative content for understanding coping are *narrative construction* (or “an organized and coherent explanation or story surrounding the trauma,” p. 2) and *emotional expression*. Narrative construction captures the way individuals organize the elements of their experiences, and emotional expression demonstrates the way people synthesize their emotions through narrative. The present study assesses narrative construction through narrative coherence as it is assessed in the narrative study of lives

research (Baerger & McAdams, 1999) and through linguistic content analysis emerging out of the expressive writing paradigm (Chung & Pennebaker, 2012). Emotional expression will be conceptualized and operationalized through the constructs of narrative tone (McAdams, 1993), narrative frame (McAdams et al., 2001) and linguistic content (Chung & Pennebaker, 2012; Pennebaker et al., 1997). Examining these four sense-making indicators – coherence, tone, frame, and linguistic content – in conjunction will capture a unique, multi-faceted, and holistic picture of the way daughters narratively process their experiences. Drawing upon the theoretical, conceptual, and methodological foundations of narrative theorizing and expressive writing, therefore, the following section will detail the importance of analyzing the content of daughters' narratives through these indicators.

Narrative coherence. A well-formed or coherent narrative “hangs together” (Bruner, 1990; Fisher, 1987) and represents a sophisticated level of sense-making by drawing meaning from and connecting together the events characters and plotlines of a story (Baerger & McAdams, 1999; Gergen & Gergen, 1987; Koenig Kellas & Manusov, 2003; Labov & Waletzky, 1967; Wigren, 1994). Wigren (1994) and Koenig Kellas and Manusov (2003) assert that complete narratives are those that organize story elements sequentially and episodically, display cause-and-effect connections, establish and link together characters, make sense of affect, and draw meaning from the events. Stories that adhere to the elements of coherence or completeness are considered “well-formed narratives” (Gergen & Gergen, 1987, p. 270) or “better” stories in Western culture. Those storytellers who do not follow assumptions of coherence violate cultural rules of narrative construction, and their stories may not be considered a story at all (McAdams, 1993).

Since coherence is a particularly important cultural expectation and indicator of meaning made of an experience, Baerger and McAdams (1999) sought to understand the psychological characteristics of those who tell coherent stories and those who do not. Through their narrative study of lives, the researchers created and validated a measure of narrative coherence, and established its connection to the psychological well-being of the storyteller. Baerger and McAdams' model of narrative coherence presents four interrelated features of a coherent story: (a) orientation, (b) structure, (c) affect, and (d) integration. *Orientation* provides the audience with the backdrop or context of the story, including introducing central characters, locating the story temporally, and explaining the past events subsequent to the story. A strong orientation provides the reader with an understanding of the location of the story within the storyteller's broader life structure. The *structure* of a story refers to the construction of the fundamental elements of a story plot, including the following: an initiating event (i.e., the genesis of the occurrence); an internal response to this event (i.e., the narrator's emotional and cognitive reaction); an attempt (i.e., the narrator's efforts to overcome or remedy the present issue); and a consequence (i.e., the outcome of the narrator's attempt). These structural elements should develop in a temporally sequential way. The third element of coherence, *affect*, reveals the narrator's emotional evaluation of the event. In highly coherent stories, the storyteller creates and emphasizes drama, humor, tension, or pathos to create an overall emotional tone or evaluation of the story. Finally, *integration* refers to the way in which the narrator synthesizes, remedies, and resolves the elements of the story in a cohesive and whole way. Highly coherent stories situate the experience in the context of the larger life story, and reconcile seemingly disparate elements to create a unified narrative.

Together, Baerger and McAdams' (1999) model of coherence represents the degree to which individuals, such as daughters in the present study, can construct and tell their seemingly complex and messy life stories in organized and integrated ways.

Narrative coherence offers insight into the ways in which individuals have made sense of their lives and has been linked with the well-being of the storyteller. McAdams (2001) notes that individuals seek to create coherent stories as a way to create an “integrative narrative of self that provides modern life with some modicum of psychosocial unity and purpose” (p. 101). For example, in their experimental manipulation of story construction, Smyth, True, and Souto (2001) found that those who wrote a coherent narrative about a traumatic experience, rather than writing about it in a list format, benefited from higher rates of psychological health. Similarly, Koenig Kellas and Manusov (2003) found that narrative coherence was significantly associated with adjustment to a break-up (Koenig Kellas & Manusov, 2003). Also, Baerger and McAdams (1999) found that story coherence was positively related to happiness and satisfaction with life, and negatively related to depression. Specifically, structure, affect, and integration negatively predicted depression, affect was linked to happiness, and orientation, affect, and integration were positively related to satisfaction with life. Based on these results, Baerger and McAdams posited that an individual's psychological well-being is related to, and perhaps a result of, the construction of coherent life stories.

Narrative coherence is examined in the current study in order to assess the narrative construction dimension (Pennebaker et al., 1997) of daughters' sense-making and coping. Identifying the elements of coherence within a story – orientation, structure, affect, and integration – illuminates the ways daughters construct and synthesize the

seemingly disparate elements of their complex and stressful experience (Baerger & McAdams, 1999). In addition to examining the overall coherence of a story at the macro-level, previous research has also examined narrative content at a more micro-level, including specific words that indicate cognitive sense-making.

Linguistic content. Most research on narrative content analyzes overarching narrative patterns such as themes (Kranstuber & Koenig Kellas, 2011; McAdams, 1993), coherence and completeness (Baerger & McAdams, 1999; Koenig Kellas & Manusov, 2003), or turning points (McLean & Breen, 2009). These narrative patterns depict the overall sense-making of the narrator, but do not allow for a more micro-analytic assessment of linguistic content (Pennebaker et al., 1997). The specific language storytellers use, however, reflects the topics to which they are (consciously or subconsciously) attending, making language an important marker of narrative meaning-making. Indeed, “tracking people’s language use, [just like] tracking people’s gaze, can tell us where they are attending. At the most superficial level, content word categories [such a death, sex, money, or friends] explicitly reveal where individuals are focusing” and how they are processing the situation (Tausczik & Pennebaker, 2010, p. 30). Further, Chung and Pennebaker (2012) critiqued researchers who rely upon global narrative coding and rating systems due to the potentially biased perceptions of human coders and raters, and the “complex, unreliable, and subjective” (p. 207) nature of the participants’ experiences.

To redress the limitations of the existing narrative analysis systems, Pennebaker and Francis (1996) developed the Linguistic Inquiry Word Count (LIWC) software. This program is used in their studies on the benefits of expressive writing in order to conduct a

close-text analysis of words and phrases in participants' texts as predictors of increased well-being over time (Chung & Pennebaker, 2012; Pennebaker & Francis, 1996). The LIWC draws from a bank of grammatical, psychological, and content word dictionaries to classify the words of a text into 80 language categories, including emotion words (e.g., positive and negative emotions), social words (e.g., "communication", "family", "friends"), function words (e.g., pronouns, articles, auxiliary verbs), and cognitive mechanism word categories (e.g., causal words, insight words, tentativeness). In its development, human judges verified and validated LIWC's classification of words into established emotional and cognitive word categories (Pennebaker, Francis & Booth, 2001). Since its inception, the LIWC has been tested and used extensively in hundreds of studies investigating stories of trauma and has been linked to hundreds of psychological processes (see Chung & Pennebaker, 2012; Tausczik & Pennebaker, 2010 for reviews).

Using LIWC's close text analysis, researchers have been able to link everyday language use, such as accounts of difficult situations, with behavioral, cognitive, psychological, and social states. In their analysis of data from seven narrative writing studies, for example, Pennebaker et al. (1997) found that those who used a moderate amount of negative emotion words (e.g., "anxious," "depressed," "hate") and a high amount of positive emotion words (e.g., "awesome," "love," "yay") over three days experienced improved physical health over the course of three weeks. Researchers have hypothesized that narrators who process negative emotions and express positive emotions organize and make sense of their experiences more effectively than those who use a different linguistic pattern to describe their emotions (Chung & Pennebaker, 2012). Other studies have noted those using a higher frequency of cognitive mechanism words,

including insight words (e.g., “consider,” “know”) and causal words (i.e., “because,” “effect”) benefited considerably from expressive writing over those who used fewer of these words (Frattaroli, 2006; Pennebaker, 1993; Pennebaker et al., 1997). Those who use cognitive mechanism words gain insight about the characters, plot, and affect involved in the situation and therefore may benefit from a reappraisal of their difficult event (Tausczik & Pennebaker, 2010).

In sum, findings about linguistic content indicate that researchers can access individuals’ sense-making of an experience through close text word count and analysis. Past research has consistently shown that individuals’ use of positive emotion, negative emotion, and cognitive mechanism words when writing stories of difficulty predict higher rates of coping, and thus the current study will assess these three language categories within daughters’ stories of distress. In the current study, the LIWC will supplement the other narrative analyses (coded and rated by research assistants) by providing a microanalytic look at the language used in the daughters’ stories, in conjunction with the macroanalytic data provided by the investigations of narrative coherence, tone, and frame.

Thus far, the current study has explored macro- (coherence) and micro-analytic (linguistic content) approaches to accessing narrative construction dimensions of sense-making in daughters’ stories (Pennebaker et al., 1997). The second dimension of narrative sense-making, emotional expression, captures the meaning gleaned from the emotions of a story and thus is also a necessary element of analysis in the current dissertation. In addition to affect and emotion words, one of the most important elements of emotional expression is the overall tone of the story (McAdams, 1993, 2001; McAdams et al., 2001;

McLean & Pratt, 2006). Emotional tone, or affect, is an important indicator of emotional processing and well-being in a story, therefore narrative tone will be investigated in the present dissertation as well.

Narrative tone. Narrators create “narrative tone” (McAdams, 1993) by the way they incorporate positive and negative emotion throughout their story. Stories contain a characteristic emotionality or tone that ranges from extremely positive (emphasizing emotions such as happiness and joy) to extremely negative (emphasizing fear and anger) (McAdams, 1993; McAdams et al., 2001). McAdams (1993) theorizes that narrative tone represents some of the most fundamental lessons learned and core beliefs about the nature of the world or the extent to which one believes that the world is a good place, and that one’s place in it is more or less secure (McAdams, 1993). Likewise, Fiese and Sameroff (1999) note that “as a paralinguistic aspect of language, [tone] is an exceedingly important part of the communication process” (p. 10).

Researchers have found that narrative tone is predictive of the personality and psychological state of the storyteller. Narrative tone is related to identity formation (McLean & Pratt, 2006) and personality traits such as neuroticism (McAdams, Anyidoho, Brown, Huang, Kaplan, & Machado, 2004). Moreover, in their study of life stories at mid-life, Grossbaum and Bates (2002) found that narrative tone predicted well-being through self-acceptance and life satisfaction. Thus, research in the narrative study of lives demonstrates that narrative tone affects and reflects well-being in storytellers.

In short, narrative tone represents the emotional expression dimension of narrative sense-making (Pennebaker et al., 1997). In the present study in particular, the tone daughters choose to employ in their stories will provide insight into how they have

processed the complex emotions surrounding their difficult experience. Narrative tone shapes and is shaped by the emotions, perspectives, and well-being of the narrator, and thus is an important indicator of daughter sense-making of difficulty in the current study.

Narrative frame. Unlike narrative tone which assesses the overall emotional feel of the narrative, narrative frame investigates how emotion and affect *progress* through the course of the story (Koenig Kellas, Baxter, Braithwaite, LeClair-Underberg, Routsong, Thatcher, & Lamb, 2009; McAdams et al., 1997). The first study of “narrative frame” (as coined by Koenig Kellas et al., 2009) was McAdams, Diamond, de St. Aubin, and Mansfield’s (1997) research comparing the life stories of highly generative (those with strong concern for and commitment to promoting future generations) and less generative adults. Findings indicated that highly generative adults construct their life stories in redemption sequences, or narrative frames in which “decidedly bad events are subsequently redeemed or made better, resulting in good outcomes” (McAdams et al., 1997, p. 684). Redemption stories contain experiences involving sacrifice, growth, recovery, learning and improvement. Although these stories were no more optimistic in tone and did not contain a greater number of positive experiences or a lesser number of negative experiences than less generative stories, they were more likely to precede and “give birth” to positive scenes. In contrast, less generative adults’ stories were more likely to contain contamination sequences, or those wherein “decidedly good events become very bad” (p. 684) (e.g., a new job leads to increased stress and time away from home).

Narrative frame has been linked to outcomes of well-being and generativity in several studies. For example, in McAdams et al.’s (2001) research, contamination

sequences were positively associated with depression and negatively associated with life satisfaction, self-esteem and narrative coherence. Those who characterized their stories of struggle in redemption sequences, rather than contamination sequences, however, were more likely to have higher levels of life satisfaction, life coherence, and self-esteem, and less likely to be depressed (McAdams et al., 2001). Likewise, in their study of stepfamily origin stories, Koenig Kellas et al. (2009) reported that those who told redemptive stories of the origins of their stepfamily were much more satisfied with their stepfamily than those who told contaminated or ambivalent stories.

These findings indicate the importance of studying narrative frame in relation to storyteller well-being and as an indicator of the emotional expression dimension of narrative sense-making (Pennebaker et al., 1997). Through narrative frame, researchers are able to witness the process individuals undergo to organize their emotions within the progression of a single story. Further, several narrative researchers have argued for the importance of investigating both narrative tone and narrative frame when assessing emotional expression of a story (McAdams et al., 1997; McLean & Pratt, 2006). Narrative tone and frame may work in conjunction or apart from one another, and represent corresponding, yet uniquely important elements of emotionality in a story. Thus, the current study will investigate the daughters' narrative frame in addition to narrative tone in their stories of difficulty as elements of narrative sense-making content.

Summary. The content included in narratives of difficulty demonstrates the degree to which individuals have made sense of their stressors. Overall, findings grounded in narrative theorizing and the expressive writing paradigm suggest that those who create stories of challenging experiences in structurally coherent and emotionally

positive ways fare better than those who do not. Because of this, narrative coherence, linguistic content, tone, and frame were used to assess how daughters narratively process their difficulty before and after talking with their mother about their problems.

In addition to constructing the *content* of effective stories, individuals make sense of their experiences through the *process* of telling and retelling their stories (Koenig Kellas, 2005). In her study of joint storytelling in family triads, Koenig Kellas argued that narrative sense-making occurs both through the content of a family's story, and through the process of collaborating to tell the story. Building upon that theorizing, the current study assesses the content of daughters' stories through coherence, linguistic content, tone, and frame, and the process of daughter storytelling by investigating the way stories change over time and how interpersonal communication with mothers relates to changes in daughters' narrative meaning-making over time. Thus, to begin the investigation of narrative sense-making process, the following section details the importance of assessing the development of narrating sense-making over time.

Narrative sense-making: The process of storytelling over time. Research in the expressive writing paradigm (Berry & Pennebaker, 1993; Frattaroli, 2006; Pennebaker, 1993) serves as a foundation for investigating narrative change in the current study. This relatively small body of research has highlighted the importance of change in narrative meaning by examining accounts of traumatic experiences written over time. Overall, findings show that those individuals who demonstrate increased sense-making within their stories (rather than decreased or consistent sense-making) over time also exhibit higher rates of well-being and coping (Pennebaker, 1993; Pennebaker et al., 1997; Pennebaker & Stone, 2003).

The central tenet of the expressive writing paradigm is that disclosing about one's difficult experiences through story writing or telling facilitates coping and well-being (Pennebaker, 1993). For the past two decades, Pennebaker and his colleagues have developed and empirically tested their experimental disclosure intervention technique, which encourages participants to write out accounts of a difficult experience, thereby psychologically and emotionally processing their stressor (Berry & Pennebaker, 1993; Pennebaker, 1993; Pennebaker & Hoover, 1986). Although the expressive writing treatments vary in form, they usually involve participants writing out the story about a personal difficult experience over three consecutive days, and also completing measures of psychological and/or physical health (Frattaroli, 2006). The researchers have found that, despite the apparent health benefits of disclosing traumatic events, people are often inhibited from doing so because they fear the negative repercussions (e.g., stigma) of disclosing taboo information or are anxious about confronting their negative emotions. Inhibition leads to rumination over one's negative experiences, which is associated with long-term stress and disease (Pennebaker & Hoover, 1986; Rose, Carlton, & Waller, 2007). Thus, anonymously writing about past traumatic events disinhibits individuals from their stressors and helps them to make sense of their experiences. Research in the expressive writing paradigm supports the ideas that (a) writing about traumatic experiences facilitates and represents individuals' coping and well-being, (b) narrative change over time is predictive of increased well-being, and (c) the process of sense-making can be explained through narrative theorizing. Each of these ideas is discussed below in order to study the ways in which daughters' narratives may change over time, and in relation to their mothers' social support behaviors.

The benefits of writing stories of difficulty over time. Writing about difficult experiences has numerous health benefits including improvements in participants' mental and physical health. Participants benefit from writing about their trauma through improvement of their overall health and immune functioning, and reduction in their stress response (Berry & Pennebaker, 1993; Pennebaker, 1993). Specifically, Pennebaker and colleagues have found that when people are asked to write or talk about personally upsetting experiences, significant improvements occur in physical health (e.g., number of visits to the health center, blood pressure) and mental health (e.g., anxiety, homesickness, negative moods, emotional functioning) (e.g., Pennebaker, 1993; Pennebaker & Beall, 1986; Pennebaker, Colder, & Sharp, 1990). These health outcomes have proven to sustain over time, such as increased immunological function as much as six weeks after the disclosure (Pennebaker, Kiecolt-Glaser & Glaser, 1988). Similar lines of research have supported these assumptions across numerous designs and experimental manipulations, and in various populations (e.g., college students, prisoners, HIV patients) (Lyubomirsky, Sousa & Dickerhoof, 2006; Murray & Segal, 1994; Petrie, Fontanilla, Thomas, Booth & Pennebaker, 2004; Richards, Beall, Segal, & Pennebaker, 2000). These findings indicate that the act of writing accounts of their difficult experiences over time helps individuals organize and cope with their stressors; and thus the present study examined daughters' sense-making through their written narratives of difficulty over the course of a four-week study.

Sense-making change over time. Not only is the act of writing over time beneficial, but evidence of increased sense-making has also been related to individual well-being. Pennebaker (1993) and Pennebaker and Stone (2003), for example, noted that

those who show improvements in sense-making over time benefit the most from the expressive writing exercise. Specifically, those who *increased* their use of insight words (e.g., “consider,” “know”), causal words (i.e., “because,” “effect”) and/or positive emotion-based words over the course of three writing exercises showed most significant improvements in mental and physical health during the course of the study (Pennebaker, 1993; Pennebaker et al., 1997; Pennebaker & Francis, 1996). Additionally, in their research on language use over time, Pennebaker and Stone (2003) found that increased positive affect words, less self-references, and more future-tense talk was associated with increased cognitive complexity over time. In order to elucidate these findings, Pennebaker & Francis (1996) proposed the cognitive change hypothesis, which states that those who increase their use of cognitive mechanism words are most likely to show improvement over time. Expanding upon this hypothesis, Graybeal, Seagal and Pennebaker (2002) interpreted the increased use of cognitive words as increased insight regarding the difficult experiences and the increased use of affect-based words as increased emotional processing.

As a whole, findings from the expressive writing paradigm demonstrate that the rate of cognitive and affect word use correlates positively with well-being over time. The current dissertation adds to this scholarly understanding of linguistic content by incorporating research from the narrative study of lives, which suggests that coherence, tone, and frame are also uniquely linked to individual well-being over time (e.g., McAdams, 1993; McAdams et al., 2001). In other words, stories that increase in coherence and become more positive in tone and frame over time should be meaningfully related to individual health. By investigating how change in all four indicators of

narrative sense-making – coherence, linguistic content, tone, and frame – predicts well-being over time, the current study expands theoretical knowledge in both the expressive writing paradigm and narrative theorizing. As a whole, expressive writing research has found that sense-making is a complex endeavor involving individuals coming to terms with their life experiences over time; one theory that helps to explain this process by linking narrative theorizing and the expressive writing paradigms together is cognitive processing theory.

Narrative sense-making and cognitive processing over time. Several theorists have presented explanations for the mechanisms behind the benefits of experimental disclosure over time, such as inhibition theory (i.e., writing results in catharsis), self-regulation theory (i.e., “practicing” emotional awareness and processing through writing) and cognitive-processing theory (i.e., writing facilitates cognitive organization and sense-making; Frattaroli, 2006). In investigating the way daughters make sense of difficult events through time, the present study builds upon cognitive-processing theory, a theoretical lens that highlights the cognitive nature of making sense of difficulty. Cognitive-processing theory indicates that the act of organizing and “working through” the difficult experience, rather than merely disinhibiting from the experience, is the mechanism through which well-being occurs (Frattaroli, 2006). In their efforts to understand the nature of the expressive writing paradigm, Pennebaker and colleagues (1990) asked participants to write down what had been beneficial in their story writing exercise. Very few participants (10%) indicated that catharsis was the mechanism for improvement (as indicated by inhibition theory), whereas a great majority (76%) indicated that the writing was helpful by giving them a way to gain insight into the

experience (as indicated by cognitive-processing theory; e.g., “It was a chance to sort out my thoughts” p. 534). In her meta-analysis of experimental disclosure, Frattaroli (2006) noted,

The act of making sense of an event, of gaining insight about a trauma, and of organizing and integrating an upsetting experience into one’s self-schema is the mechanism by which expressive writing is helpful. Although the Freudian idea of disinhibition-catharsis may be necessary... it is not sufficient. One must make sense of, organize and integrate this event for benefits to occur (p. 825).

Thus, when participants write their story over consecutive days, they benefit by practicing and reinforcing this cognitive processing which helps them create more coherent and positive meaning of their difficult experiences, empowering them to then understand and overcome their problem. As such, *narrative sense-making*, rather than catharsis, is the mechanism by which daughters will benefit from writing about or narrating to their mother difficult experiences over time. Cognitive processing theory helps to link narrative theorizing (including the narrative study of lives) and the expressive writing paradigm in an effort to understand the connection between daughter sense-making and mother social support in written and communicated stories over time.

Summary. Research on the psychological and cognitive aspects of narrative has made important contributions to the understanding of the way humans make sense of and cope with difficulty. Narrative research has shown connections between the content of stories of difficulty and well-being (Buehlman et al., 1992; Fiese & Sameroff, 1999; McAdams et al., 2001; Trees & Koenig Kellas, 2009). Findings from the expressive writing paradigm demonstrate that researchers can assess sense-making through writing

and also that increases in sense-making predict increased well-being. Thus, examining change through the content and process of narrative sense-making may be an important step to understanding the ways in which individuals, particularly daughters, cope with difficulty.

Narrative psychology research, however, often overlooks the relational implications of the storytelling experience. Indeed, story creation is not an individual process, but one involving multiple voices and interpersonal influences (Koenig Kellas, 2005; Koenig Kellas & Trees, 2006; Langellier & Peterson, 1993; Mandelbaum, 1987; Polanyi, 1985). Expressive writing research has indicated that writing the story and talking into a tape recorder have similar effects (Lyubomirsky et al., 2006; Murray & Segal, 1994), and studies using confederates have elicited similar results as well (Frattaroli, 2006). These findings support the use of expressive writing principles in interpersonal relationships; yet the assumptions of expressive writing paradigm are just beginning to be tested in the context of interpersonal relationships (e.g., Koenig Kellas, Kranstuber, Willer, & Carr, 2012), and have not yet been investigated in family relationships such as the mother-daughter dyad. Likewise, since narrative sense-making is an interpersonal endeavor, individuals' understandings of their difficult situations likely change based, in part, on their interpersonal partners' reaction to the story. The current dissertation examines how daughters' sense-making may change over time based on interpersonal communication with their mothers. The following section details the necessity of investigating interpersonal communication as central to the process of narrative sense-making, and the importance of understanding the ways communication with a relational partner may facilitate changes in narrative sense-making.

Narrative Sense-Making through Interpersonal Communication

Although understudied as such, the narrative sense-making process is largely interpersonal. Scholars (Koenig Kellas, 2008, 2010; Maines, 1993) have argued that the study of narratives should be situated within human communication, and should significantly contribute to the scholarly understanding of symbolic meaning-making in people. Although narrative research is growing in the communication field, it largely focuses on master narratives or individuals' stories, rather than the communicative processes inherent in storying one's experiences (c.f., Koenig Kellas, 2005; Koenig Kellas & Trees, 2006; Trees & Koenig Kellas; see Koenig Kellas, 2008 for a review). Likewise, although the change in meaning-making over time is an important indicator of coping with difficult experiences, and narrative sense-making is considered an interpersonal endeavor, narrative change has not yet been investigated with respect to interpersonal communication. The present dissertation will begin to redress this gap by examining the ways in which daughters' narrative meaning about a difficult experience changes after she discusses the problem with her mother. The current study builds on and extends previous research in narrative and interpersonal communication in two overarching ways.

First, building upon a small body of research on the interpersonal process of narrative sense-making (Koenig Kellas, 2005; Koenig Kellas & Trees, 2006; Trees & Koenig Kellas; see Koenig Kellas, 2008), the present dissertation will empirically test individual narrative sense-making as an important concept related to interpersonal communication, rather than merely an intrapersonal component of the storytelling process. A body of research across fields has examined how individuals *jointly*, or

communicatively, make sense of their life experiences, and how the behaviors enacted in conversations about life experiences predict psychological and physical well-being (e.g., Buehlman et al., 1992; Carrere, Gottman, Buehlman, Coan & Ruckstuhl, 2000; Koenig Kellas et al., 2010; Pratt & Fiese, 2004). For example, findings show that the language that married couples use in the story of how they met, fell in love and got married is predictive of the meaning they make of their marriage as a whole (Carrere et al., 2000; Veroff, Sutherland, Chadiha, & Ortega, 1993). Moreover, families who jointly construct story coherence tend to engage in more sophisticated sense-making than those with limited coherence (Koenig Kellas & Trees, 2006). These studies suggest that interpersonal communication affects and reflects story construction and meaning created, and that interlocutors help each other to create meaning through their stories of difficulty. As such, the current study on narrative sense-making, typically studied as a psychological construct, will be grounded in research on the interpersonal elements of story creation and storytelling. In so doing, it will advance knowledge on the interpersonal factors associated with individual narrative sense-making.

Second, the current study examines the ways in which the quality of mothers' communicative behaviors may help to explain *changes* in daughters' narrative meaning. Past research in interactional sense-making (Koenig Kellas, 2005; Koenig Kellas & Trees, 2006; Koenig Kellas et al., 2009; Trees and Kellas, 2009) has investigated the behaviors associated with sense-making in dyads and groups when telling a story at one point in time. Findings from these cross-sectional studies note that family-level sense-making contributes to individual cognitive processing. Specifically, in their investigations of family storytelling and sense-making, Koenig Kellas and Trees (2005, 2006) found

that, when families tell stories about a shared problem, family members incorporate each other's communicated insights into their overall meaning-making. Specifically, when families told stories together, they made meaning, in part, through individual-sense-making, wherein individual family members drew personal conclusions from joint storytelling processes (Koenig Kellas & Trees, 2005, 2006). Thus, Koenig Kellas & Trees' studies on interactional sense-making demonstrates that family communication affects and reflects individual sense-making; the current study builds upon this tradition of scholarship by testing the way interpersonal communication may actually *change* the content of narrative sense-making. Although researchers have found that changes in sense-making are predictive of greater well-being (Pennebaker, 1993), no known research has investigated the ways that the quality of interpersonal interaction contributes to the narrative sense-making process over time. This knowledge can help future researchers and practitioners recognize the communicative behaviors necessary to work toward productive sense-making during and after a difficult experience.

Therefore, the current study further investigates interpersonal communication, particularly in the context of mother-daughter interactions, occurring in relation to daughters' stories of difficulty. As social support is a common response to difficulty in families (Fischer, 1986; Gardner & Cutrona, 2004), mothers may attempt to provide support to their daughters when they are creating and telling their difficult stories. Or, given the varied and dynamic nature of mother-daughter relationships (Fischer, 1986; Miller-Day, 2004; Tannen, 2006), some mothers may provide ineffectual support, or no support for their daughters at all (Burleson, 1994). Just as storytelling research has highlighted the importance of storytelling behaviors as predictive of sense-making and

well-being (e.g., Trees & Koenig Kellas, 2009), social support research has found that the *quality* of support-providers' behaviors is predictive of sense-making and well-being in distressed individuals (e.g., Burleson, 1994). The degree to which mothers respond supportively to daughters' stories of difficulty, therefore, may help to explain variations in daughters' sense-making and well-being over time. Thus, in order understand how mothers may help their daughters to narratively make sense of difficult situations, the current study turns to literature on social support. This extensive body of literature can inform narrative scholars on one of the most common and influential ways in which humans relate to each other, and thus process their experiences interpersonally. Likewise, social support scholars may benefit from understanding the process through which individuals narratively make sense of their experiences through social support. Thus, the following section will argue for the importance of exploring supportive communication within the context of narrating difficulty.

Sense-Making through Social Support

Individuals cope with their difficult experiences within and through interpersonal relationships. In fact, 86% of people indicate that, if they are worried about a problem and cannot find a resolution, they will discuss the problem with a close relational partner (Goldsmith, 2004). Relational partners provide each other with social support, which promotes coping with their difficult experiences (Burleson & Goldsmith, 1998). Burleson and Goldsmith argue that in order to understand individual coping/sense-making, scholars must work to understand the communication that surrounds that sense-making. Thus, social support may be both the response to and the context in which stories of difficulty occur. The following section will argue for the importance of studying the

intersection of narrative sense-making and social support theorizing in an effort to understand how daughters' narratives change based on discussing their stressors with their mothers.

Social support. The study of social support is a multi-faceted and multi-disciplinary endeavor. The concept of “social support” emerged in research in the mid-1970s from researchers studying the link between life stress and mortality/morbidity (e.g., Cobb, 1976). These researchers sought to understand the reasons why certain individuals managing life stressors succumb to negative physical, psychological, and relational effects, and others maintain functional relationships and positive mental health. Cobb found that social support was the most powerful moderator on the influence of stress on health and well-being. Since then, social support has been studied in various disciplines (e.g., social and clinical psychology, health psychology, sociology, communication studies) and through a variety of methods (e.g., self-report, interviews, focus groups, observation; Burleson & Goldsmith, 1998). Like narrative sense-making, social support in close relationships is predictive of many individual and relational outcomes, including perceptions of relational quality (Sprecher & Hendrick, 2004; Weber & Patterson, 1996), solidarity (Weber, Johnson & Corrigan, 2004; Wheelless, 1978), and self-esteem and perceptions of competence (e.g., Franco & Levitt, 1998).

The various perspectives on and approaches to the study of social support have provided researchers and practitioners with a breadth of information on the topic. Cutrona (1996), for example, defined social support from a communicative standpoint as: “responsiveness to another’s needs and more specifically as acts that communicate caring; that validate the other’s worth, feelings or actions; or that facilitate adaptive

coping with problems through the provision of information, assistance or tangible resources” (p. 10). Scholars studying the communicative enactment of social support (i.e., “enacted support”) focus on the (perceived and/or observed) behaviors and messages present in a social support interaction, rather than perceived social support, or the perception of support available (Goldsmith, 2004).

Communication researchers have created a taxonomy of six types of social support manifested in interpersonal contexts. These six types are: (a) emotional support (expressions of caring, concern, empathy and reassurance of worth), (b) informational support (information and advice or new perspectives on a problem), (c) tangible support (offers of goods and services), (d) appraisal support (providing new information relevant to self-evaluation), (e) esteem support (giving reassurances of worth), (f) network support (opportunities for socializing or belonging to a group; Goldsmith, 2004). In the context of mother-daughter conversations about daughters’ difficulty, mothers are likely to enact emotional support in response to their daughters’ distress. Difficult experiences often heighten the stress response of individuals, which leads to greater negative emotions such as anxiety, depression and anger (Lazarus, 1991, 1999). These difficult experiences and negative emotions lead to heightened emotional needs, and thus, given that the mother-daughter relationship is often one of women’s first and most important sites for (effective and ineffective) support (Miller-Day, 2006; Fischer, 1986), many daughters will turn to their mothers for emotional support (Fisher, 2010). Given that emotional support behaviors are enacted (or not enacted) to help others adjust to life stressors (Fisher, 2010), emotional support serves as a unifying theoretical and conceptual frame from

which the current study will investigate mothers' behaviors occurring in interactions with daughters about difficult experiences.

Emotional support. Emotional support, or “specific lines of communicative behaviors enacted by one party with the intent of helping another cope effectively with emotional distress” (Burleson, 2003, p. 552), is an important relational tool when coping with distress. Receiving high quality emotional social support predicts positive psychological, physical and relational outcomes (see Burleson & MacGeorge, 2002 for review). Specifically, the psychological functioning associated with enacted emotional support includes less depression (Edwards & Clark, 2004) and better overall adjustment (Manne et al., 1999). For example, Oakley, McPherson and Roberts (1990) found that emotional support is an interpersonal element that positively influences women's emotional response to miscarriage; and conversely, a lack of effective emotional support following a miscarriage can lead to depression (Conway & Russell, 2000).

However, although support providers generally intend to provide helpful support, not all emotional support is effective. Many behaviors intended to be supportive do not promote coping, and at times they do more harm than good (Burleson & Goldsmith, 1998). Goldsmith (2004), for example, notes that failing to uphold a distressed individual's positive and/or negative face can result in more negative psychological and relational outcomes than if the supportive interaction had not taken place. Thus, even though social support is valued, many supportive efforts are quite insensitive (Burleson, 1984). Burleson and Goldsmith (1998) asserted that scholars must study the differences between effective and ineffective support behaviors in order to strengthen the theoretical foundations of the study of social support as well as its practical applications (e.g.,

Goldsmith & Brashers, 2008). This call to research is especially relevant to the mother-daughter dyad, which is characterized by dynamism and varying levels of satisfaction, certainty, stress, and support, and thus both effective and ineffective support (Fischer, 1986; Fisher, 2010; Miller-Day, 2004).

In an effort to explain support interactions at varying levels of effectiveness, researchers have identified several communicative behaviors indicative of healthful social support. Goldsmith (2004) stated that effective support messages (a) create and maintain a supportive communication environment, (b) help the partner to focus on emotions and coping efforts, and (c) encourage the partner to elaborate on emotions and coping through detailed narratives. In Burleson and Kunkel's (2002) study on children's emotional support skills, they conceptualized emotional support behaviors as comforting ability, perspective-taking ability and social perspective-taking ability. In short, a variety of social support researchers have asserted that messages involving active listening, empathy, sympathy, concern, compassion, validation of feelings, and encouragement toward one another are most effective at helping distressed individuals cope (Burleson, 1990; Cutrona & Suhr, 1994; Fisher, 2010; Rittenour & Martin, 2008). These support behaviors have been shown to significantly contribute to distressed individuals' well-being, affect change, acceptance, coping, and perceived control over the events, whereas ineffectual or lack of social support may cause greater distress and lower rates of well-being in support-seekers (see Burleson, 1990 for a review).

Further, certain support behaviors may be more influential than others in the context of interpersonally narrating difficulty. Scholars who study narratives have identified behaviors such as engagement and perspective-taking (Trees & Koenig Kellas,

2009), confirmation (Wamboldt, 1999), and positive talk (Buehlman et al., 1992; Veroff et al., 1993) to be related to sense-making and well-being in family dyads and groups. Similarly, scholars who study support have identified behaviors such as empathy, listening, perspective-taking, and compassion as important for effective social support (Burleson, 1990). Thus, these two bodies of literature – narrative theorizing and emotional support – combine to indicate three specific support behaviors that are likely to influence narrative sense-making – perspective-taking, empathy, and facework. In particular, narrative research in joint storytelling consistently points to *perspective-taking*, or attending to and confirming a relational partner’s perspective, as important to meaning-making (Koenig Kellas & Trees, 2006), individual well-being (Koenig Kellas et al., 2010) and relational well-being (Koenig Kellas, 2005). Similarly, *empathy*, or an individuals’ abilities to show that they are aware and understanding of their distressed partner’s feelings (Rogers, 1957), is considered a fundamental quality of effective supportive interactions (e.g., Cutrona & Suhr, 1994; Rogers, 1957; Sarason, Sarason, & Pierce, 1994), and thus will likely be important in mother-daughter support interactions. Finally, *facework*, or behaviors intended to uphold one’s positive image and free will (Brown & Levinson, 1987), is vital in supportive contexts due to the emotional vulnerabilities present in receiving help (Goldsmith, 2004). Since facework is necessary to encourage distressed individuals to feel safe to discuss their problems, it will likely be an important contributor to daughter storytelling and sense-making as well.

Thus, in the present study, daughters’ global perceptions of their mothers’ communicated emotional support will be assessed, as well as three additional behaviors that represent and comprise emotional support – empathy, facework, and perspective-

taking. Researchers have called for support to be measured through multiple measures and constructs in an effort to create a more holistic picture of the complexities of social support (Burleson, 1994; Rushton, 1980). By studying perceptions of general communicated emotional support as well as empathy, facework, and perspective-taking, the present study assesses social support in a way that highlights the importance of specific communication behaviors in social support. This provides researchers with a more pointed look at the interpersonal behaviors that fuel and stifle coping in distressed individuals. The following section will explain the utility of supplementing the investigation of communicated emotional support with an exploration of the support behaviors empathy, facework, and perspective-taking.

Empathy. Researchers have found that empathy is an important element in the social support process. In a popular analysis of comforting behaviors in counselor-client interactions, Rogers (1957) described empathy as one of the most necessary behaviors for a counselor to express to bring improvement to the client. He conceptualized empathy as the counselor's ability to communicate to the client that he/she is aware of and understands the client's feelings. Sarason et al. (1994) and Cutrona and Suhr (1994) also note that an important aspect of social support contexts is "the extent to which a support provider is aware of and sensitive to the needs of the recipient" (Sarason et al., 1994, p. 94).

An expression of empathy helps to create a climate in which distressed individuals can maximize their self-exploration and self-understanding (Burleson, 1994). This self-exploration is also a quality that is encouraged in expressive writing studies (Berry & Pennebaker, 1993; Frattaroli, 2006; Pennebaker, 1993). Specifically,

researchers prompt individuals to write out the details of their difficult experience several times in order to work through their emotions regarding the experience, thus promoting self-understanding. Empathy may function in a similar way in interpersonal interactions. Specifically, when support providers create a climate of empathy that allows individuals to fully explore their feelings and perceptions of their experiences, they also likely create an environment which facilitates sense-making (Burleson, 1994). Overall, numerous social support researchers have noted the importance of empathy – and thus the negative implications of lack of empathy – to facilitate coping in distressed individuals (e.g., Burleson, 1990; Cutrona & Suhr, 1994; Rittenour & Martin, 2008). Thus, in the context of the current study, quality of mother empathetic communication will likely positively predict daughter narrative sense-making of her difficult experience.

Facework. Communication scholars note that effective social support is partially contingent on the support provider's ability to provide messages and demonstrate behaviors appropriate to the needs of the distressed person and the context of the support interaction. Specifically, Goldsmith (1994, 2004) notes that facework strategies are a vital consideration in the communication of support. Specifically, the principles of politeness theory suggest that one of the most powerful forces in interpersonal relationships is humans' desire to uphold their own and their relational partner's positive and negative face (Brown & Levinson, 1987). Positive face is the self-image individuals desire to project to the public, and negative face is one's desire to act freely and apart from imposition. When support recipients believe that their dilemma conflicts with their projected self-image, concerns for positive face occur; concerns for negative face exist when recipients fear that their personal choices and decisions will be constrained by the

support-provider's response (Goldsmith, 1994). Support messages that show respect for the distressed individual's positive and negative face, particularly person-centered messages (Burlison & Samter, 1985), are more effective at helping individuals cope than messages that do not respect face concerns (for a review, see Goldsmith, 2004).

When support providers use face-threatening messages, recipients feel more restricted to discuss their distress, and thus less able to explore and freely express their emotions and concerns (Goldsmith, 1994), which may lead to an inability to effectively make sense of their stories of difficulty (Pennebaker, 1993). In fact, in their longitudinal investigation of expressive storytelling between friends, Koenig Kellas et al. (2012) found an increase in storytellers' perceptions of their relational partners' face threats over time, and this increase was reported in conjunction decrease in positive affect for storytellers over time. These findings suggest that facework is an essential component of effective support, and may be linked to well-being in the current study.

Given the importance of positive and negative facework in social interactions, it will likely be an important contributor to any change in sense-making that occurs in social support interactions. Positive facework creates a supportive and validating interaction, and negative facework promotes a context that empowers distressed individuals to work through their difficult situations. Thus, if daughters' positive and/or negative face is supported, they may feel more empowered to express and process their ideas and thoughts to their mother, thereby facilitating growth in their sense-making; if face is not supported, daughters may feel stifled in their sense-making efforts (Goldsmith, 2004). Moreover, mothers' failure to uphold face may result in damaging psychosocial outcomes for distressed daughters (Goldsmith, 2004). Thus, daughters' perceptions of

their mothers' positive and negative face threats in mother support interactions are assessed in the present study in order to investigate the ways in which the degree of facework predicts daughter sense-making and well-being change.

Perspective-taking. Additionally, having one's perspective attended to, understood, and confirmed (Koenig Kellas & Trees, 2006; Koenig Kellas, Willer, & Trees, 2011) helps the distressed individual feel validated, legitimized and understood. Perspective-taking behaviors are considered central to effective emotional support, as well (Burleson, 1994; Burleson & Kunkel, 2002). Burleson and Kunkel note that effective support-providers must exhibit perspective-taking skills such as being able to recognize others' emotional cues, integrating social information and taking the other's perspective.

Likewise, research on joint storytelling has illuminated the importance of perspective-taking in narrative sense-making. In their study of joint storytelling behaviors of difficult stories, Trees and Koenig Kellas (2009) found perspective-taking (or "attentiveness to and confirmation of others' perspective," p. 104) to be one of the strongest predictors of family well-being and functioning. Notably, perspective-taking was related to family perceptions of supportiveness, or perceptions that the family is available for encouragement, comfort and assistance in times of need (Trees & Koenig Kellas). Trees and Koenig Kellas noted that in families that exhibited greater perspective-taking skills, "family members solicited, listened to, and incorporated others' perspectives into the telling of the story. There was recognition that everyone may not have experienced the event in the same way" (p. 104). As such, individuals might personally make sense of their experiences in one way, and then revise their sense-

making based on others' ideas and reactions in a conversation involving high-quality perspective-taking. Decreases in perceptions of perspective-taking have been found to operate in conjunction with decrease in positive affect over time (Koenig Kellas et al., 2012) and less behavioral perspective-taking corresponds with less developed narrative meaning-making (Koenig Kellas & Trees, 2006). Overall, the importance of perspective-taking is apparent in both the social support and narrative sense-making literature, and thus a vital support behavior to investigate in the mother-daughter support context in the current dissertation.

In sum, along with daughters' general perceptions of mothers' communicated emotional support, these three communicative behaviors – empathy, facework, and perspective-taking – are integral to understanding effective support interactions and their subsequent impact on narrative sense-making and well-being. These behaviors create an environment wherein distressed individuals feel comfortable talking through their problems in order to develop and increase their narrative sense-making. Yet, although research has shown that narrative sense-making change is predictive and representative of individual well-being (e.g., Pennebaker, 1993), no known research has investigated the link between support behaviors and changes in narrative sense-making. To these ends, Burleson (1994) called for future research in understanding how support behaviors alter the emotional and psychological states of others and claimed that this information would provide researchers and practitioners with the knowledge necessary to understand the differences between effective and ineffective social support behaviors.

Appraisal theory, which posits that effective social support facilitates cognitive reappraisals in distressed individuals (Lazarus, 1991, 1999), offers a theoretical

explanation for the complex interconnections between cognitive change, emotions, and interpersonal communication, as well as an understanding of changes in sense-making and well-being after a social support interaction. Because mother support behaviors investigated in the current dissertation – communicated emotional support, perspective-taking, empathy and facework – encourage distressed individuals to talk through their difficulties, these behaviors will likely facilitate daughters' change in sense-making, or reappraisal, of their stressful situations, as well. Thus, appraisal theory is used as a theoretical foundation for the current dissertation.

Change in narrative sense-making: Appraisal theory. Appraisal theorists hypothesize that when individuals are confronted with a difficult experience, they engage in the appraisal process, wherein they evaluate the potential impact of a situation and their subsequent behavioral goals and options (Lazarus, 1991, 1999). Individuals' appraisals shape their emotional reactions to and behaviors regarding their situations. The appraisal process works in two steps: primary appraisals, wherein the person makes a judgment of whether the event is a threat (i.e., "Am I in trouble here?"), and secondary appraisals, which are evaluations of the resources available to cope with the event (i.e., "What can I do about this?;" Lazarus, 1999, p. 75). These appraisals then create a person's emotional reaction to the event. As such, "the only way to change a feeling state is to change what produced that feeling state in the first place: the appraisals of the distressed person" (Burleson & Goldsmith, 1998, p. 258). Researchers theorize that it is the appraisal process that facilitates emotional coping (Folkman, et al., 1986). In this way, appraisal theory offers an explanation for the manner in which people react to stress

and the actions they take during and after receiving social support from their personal networks, such as the mother-daughter dyad.

As in narrative sense-making, interpersonal communication is an important component of the appraisal process. Communication theorists understand the appraisal process from the perspective of social support, in that support providers attempt to assist their distressed other in communicatively reappraising the stressful situation (Burleson & Goldsmith, 1998). Appraisal theory explains why social support does or does not help people cope with life stressors: good support providers help distressed individuals to reappraise their understanding of a situation, and this leads to more positive reappraisals and better well-being; poor support providers (or those who do not provide support) stifle distressed individuals' appraisals, and thus do not facilitate positive reappraisals or increased well-being. In effective support encounters, helpers, then, encourage the person to talk through their cognitions and emotions, in an effort to facilitate (positive) reappraisals. Negatively-valenced appraisals, on the other hand, are hypothesized to lead to greater emotional distress (Lazarus & Folkman, 1984). Creating a supportive and empathetic environment allows for distressed individuals to explore both positive and negative emotions, yet a non-supportive interaction may prevent exploration of emotions and coping, and may actually psychologically harm the individual (Burleson, 1994; Lazarus & Folkman, 1984). Emotional support is integral to overcoming difficult events; and the appraisal process is likely the mechanism for this coping (Folkman et al., 1986).

Because social support is theorized to impact individuals' appraisals, researchers have called for further study regarding the most effective emotional support behaviors for facilitating reappraisals (Burleson, 1994). Research has begun to answer that call and

found that interpersonal factors such as person-centered comfort and immediate nonverbal behaviors contribute to positive reappraisals and emotional improvement (Jones & Wirtz, 2006). The current study has built upon this knowledge to investigate daughters' perception of mothers' social support behaviors and their relationships to reappraisal (or sense-making) change through narrative over time. Thus, the present dissertation studies changes in narrative sense-making as a way to analyze (re)appraisal via social support.

Linking social support and narrative sense-making through appraisal theory.

There are strong conceptual and theoretical ties to the processes of creating (re)appraisals and constructing narratives. Appraisal theorist Lazarus (1999) encouraged emotion researchers to study individuals' narrative conceptualizations of their struggles. He noted the connection between appraisals and narratives by stating, "Appraisal theory often sounds like a narrative (e.g., Shaver et al., 1987), and makes use of a similar perspective" (Lazarus, 1999, p. 205). Indeed, effective social support behaviors encourage individuals to talk about their experiences in order to make sense of the events and increase well-being (e.g., Jones & Wirtz, 2006; Lazarus & Folkman, 1984), just as expressive writing exercises allow individuals to freely write and process their stories, which leads to cognitive processing or sense-making and increased well-being (e.g., Frattaroli, 2006). Taken from a narrative theorizing perspective, the reappraisal process is sense-making through narrative construction and telling. Indeed, if humans organize their experiences in story form (Bruner, 1990) and make sense of their world narratively (Fisher, 1987), then the appraisal process likely occurs narratively. Moreover, individuals appraise (i.e., make sense) and then reappraise their experiences through social interaction, and thus

any change in narrative sense-making occurs interpersonally as well. In this way, appraisal theory serves as theoretical support for the contention that interpersonal communication (i.e., social support) will likely predict positive and negative change in narrative sense-making. Thus, in the current dissertation, appraisal theory serves as a bridge between narrative theorizing and social support.

As such, appraisal theory and narrative theorizing can inform each other in three overarching ways. First, narrative research is often critiqued for being atheoretical such that narrative theories represent a vast and often very different approach to the study of human relationships (Koenig Kellas, 2008). In its diversity, narrative theorizing can be regarded as amorphous and overly-broad. Appraisal theory helps to ground sense-making and narrative work in theorizing in an understanding of both cognitive sense-making processes and interpersonal behavior. Appraisal theory can help to explain the interpersonal sense-making processes that occur through story construction and storytelling.

Second, as mentioned above, narrative theorizing provides an explanation for *how* the appraisal process might work – through narrative sense-making. Lazarus (1991, 1999) noted that (re)appraisal is the meaning that individuals make to explain their stressful situation, just as narrative theorizing asserts that individuals make sense of their lives narratively. Likewise, appraisal theory grounds the investigation of the way individuals' narratives change over time. Individuals create and recreate narratives to make sense of their experiences (Pennebaker, 1993), and appraisal theory explains the process through which individuals appraise and reappraise their experiences through interpersonal communication.

Third, narrative theorizing and methodology informs appraisal theorizing and social support research by strengthening the way that researchers operationalize reappraisal. Researchers testing the appraisal model have largely used cross-sectional self-report scales eliciting participants' perceived (re)appraisals of their experiences (e.g., Folkman, 1986; Jones & Wirtz, 2006), rather than testing the way their appraisals change over time and after the social support interaction. For example, in an effort to discover the qualities of social support messages associated with reappraisal and well-being, Jones and Wirtz (2006) empirically tested the appraisal model. The researchers hypothesized that effective social support behaviors would encourage individuals to verbalize their experiences, which would lead to reappraisal of the experience and thus emotional improvement. They found support for every aspect of the model, and also reported that person-centered messages and nonverbally immediate emotional support directly related to emotional improvement. However, a challenge in Jones and Wirtz' study was to effectively operationalize reappraisal. As discussed in their study's limitations, appraisal and emotional improvement were measured with three- and four-item scales asking participants for their self-perceptions of their reappraisal and emotional improvement. The researchers noted that future research should "carefully examine how to operationalize cognitive reappraisal" (p. 238) in order to capture the complexity of the reappraisal process.

Thus, one goal of the current study is to address those limitations by measuring reappraisal narratively. Specifically, (re)appraisal will be measured by comparing narrative sense-making evident in participants' stories told at several points in time – before and after the mother-daughter interaction (i.e., social support context). Measuring

sense-making through narrative is a method grounded in narrative theorizing and methodology. This approach to assessing (re)appraisal will capture sense-making in the narrative form, which is theorized to be the way humans naturally process information (Bruner, 1990; Fisher, 1987).

Another goal in operationalizing reappraisal is to test appraisal theory in a more ecologically-valid manner than past research. Namely, researchers have used self-report measures of social support received, or confederates (rather than individuals from participants' social networks) as the social support providers (e.g., Folkman, 1986; Jones & Wirtz, 2006). Researchers have noted that distressed individuals need to feel safe, secure, and supported when discussing their difficulties, and their own interpersonal relationships can provide this setting more effectively than a stranger (Goldsmith, 2004). Thus, the current study will investigate a specific relational context: the mother-daughter relationship.

Mothers are generally seen as a highly supportive family member (Barrera & Garrison-Jones, 1992) and mother-daughter pairs are considered more supportive than any other parent-child pair (Young, Miller, Norton & Hill, 1995), yet mother-daughter relationships may be characterized by contention and stress as well (Miller-Day, 2004). Moreover, the quality of mother emotional support is theorized to be an important predictor of a child's psychological and emotional adjustment such that high-quality mother support can predict child well-being, whereas low-quality support is linked to stunted or problematic adjustment and well-being (Burleson & Kunkel, 1996). The mother-daughter relationship is therefore an ecologically-valid and important context to study the content and process of narrative sense-making in interpersonal and family

relationships. The following section will explore the influence of the mother-daughter relationship on daughter well-being and sense-making. The unique qualities of mother social support will first be discussed, and then the nature of storytelling in the mother-daughter context will be investigated as a foundation to the current study.

Sense-making through Mother-Daughter Social Support

Much of the scholarship investigating family communication in social supportive situations is based on married couples' self-reports (Goldsmith, 2004), yet the mother-daughter relationship is one of the most important bonds in a woman's life, and thus worthy of study in the social support context (Gardner & Cutrona, 2004; Trees, 2000). Some scholars theorize that, given that the mother-daughter relationship is often the longest and most emotionally connected relationship in the family, the mother-daughter dyad is the closest and most important relationship in the family (Fischer, 1986). Their bond is connected for life, and the women frequently become closer with increasing age. Miller-Day (2004) notes, "Each mother-daughter relationship has a *story*. Across the years, the cast of characters change, the settings are altered and the stories evoke a range of unresolved contradictions, joys, hopes, and tensions" (p. 4).

The inherent closeness of the mother-daughter relationship produces challenges within the relationship as well. Relationships between mothers and daughters are characterized by more emotional intensity, heightened closeness and more frequent conflict than in other parent-child relationships (Fingerman, 2001). Mothers and daughters tend to evaluate and re-evaluate their relationships at their life transitions, and often become more involved in each other's lives over time. This involvement can lead to both positive outcomes such as closeness and intimacy, and negative outcomes such as

perceptions of intrusiveness or exclusion (Fingerman, 1996; Miller-Day, 2004). For example, in a longitudinal study on parent-child relationships, Kaufman and Uhlenberg (1998) found that approximately one-fifth of parent-child relationships deteriorate over the life course, and that the mother-daughter relationship is particularly subject to change and redefinition throughout the life course of the women, especially when daughters become mothers (Fischer, 1981, 1986). In fact, the “story” of mothers and daughters also involves the “awkward co-existence of both the positive and negative qualities inherent in these relationships” (Miller-Day, 2004, p. 4). In sum, the inherent intensity of the mother-daughter relationship can result in a variety of positive and negative experiences and outcomes throughout the life course of the women, and makes this relationship an important context for the study of emotional support.

Another product of their intimate relationships is that mothers and daughters often communicate quite frequently, often weekly or even daily (Tannen, 2006). During their frequent communication, mothers and daughters often tell each other mundane details about their lives. Tannen observed that mothers and daughters are often in the habit of telling each other of the daily events and minor misfortunes of their lives “because they treasure the metamessage of caring they know they will hear in response” (p. 15). Since mothers and daughters tend to communicate frequently and about (negative) events in their lives they are also likely to experience communication that calls for social support.

The mother-daughter relationship is often a vital source of social support in a daughter’s life. Daughters desire emotion-focused support from their mothers (Trees, 2002), and when girls have supportive parents, they are less likely to withdraw from their family, display hostility, insecurity and dependency upon the birth of a new sibling

(Gottlieb & Mendelson, 1990). Interestingly, Gottlieb and Mendelson found that fathers' support was most helpful for mildly distressed girls; yet support from mothers was significantly linked to a reduction in all girls' distress both before and after the birth of a new sibling. Likewise, girls with more maternal support adhered to their mothers' messages to avoid drugs and drug users, whereas the reverse was true for boys (i.e., boys with more support were more likely to use drugs). These findings demonstrate women's devotion to their mothers' supportive messages and behaviors in the face of their difficult situations, and the important implications of effective and ineffective support within this context. As a whole, mothers' support skills are highly influential to their children's well-being in times of stress, and talk in the mother-daughter relationship is especially powerful.

Mother-daughter narrative sense-making and social support. Generally, scholars note that talk plays a larger and more significant role in the formation and maintenance of relationships in girls and women than in boys and men (Tannen, 2006). Tannen notes that “among girls and women, talk is the glue that holds relationships together – and also the explosive that can blow it apart” (p. 63). Girls' relationships are centered in talk, whereas boys are taught to form relationships through activity and play.

Specifically, women in families relate to and support each other through stories and storytelling (Langellier & Peterson, 1992). Storytelling for women is an everyday phenomenon, one through which they relate to and support one another. Langellier and Peterson note that storytelling provides a powerfully unifying, ubiquitous and relationally-strengthening device for women. Women's “everyday” storytelling leaves a space for a conversational and collaborative form of relating and supporting each other.

Women are socialized through narratives to be relationship-oriented, wherein they value interpersonal relationships, closeness and disclosure (Derlega et al., 1994).

Surprisingly, and despite the importance of the mother-daughter relationship, very few scholars have investigated the communication occurring in this dyad (c.f., Miller-Day, 2004). Although the mother-child relationship is largely understudied in social support research (c.f. Gardner & Cutrona, 2004; Trees, 2000), mothers are reported as a particularly important source of support (Hunter & Youniss, 1982) and that they have more open communication with their mothers than their fathers (Noller & Bagi, 1985). In the current study, this void is addressed by investigating communication patterns and subsequent sense-making and well-being within the mother-daughter relationship.

In sum, women are told and tell each other stories, and this storytelling enables to them make sense of and help others make sense of experiences through narrative. Likewise, women are more conditioned to provide and seek social support in times of distress (Derlega et al., 1994). Thus, since women in families relate to and support each other through stories, coping becomes a relational phenomenon where women tell stories to each other in order to manage their difficult experiences narratively. The present study examines how mother-daughter communication may predict the ways in which daughters make sense of their difficult experiences. Based on the social support theories and methodologies reviewed above, the following and final section explains the purpose and hypotheses guiding the present project.

Chapter Summary and Hypotheses

Based on the principles of narrative theorizing, social support, appraisal theory, and research on mother-daughter communication, the present dissertation investigates the

ways in which mothers' communication predict changes in daughters' narrative sense-making about difficulty. Individuals can employ coping mechanisms in order to mitigate the negative psychological and physical effects of stressful experiences (Folkman et al., 1986; Lazarus & Cohen, 1977; Pennebaker, 1993), and researchers have found that constructing and telling the story about one's difficult experience can help the individual to organize and make sense of the events that took place (Koenig Kellas & Manusov, 2003; McAdams, 2001; Pennebaker, 1993; Pennebaker & Beall, 1987).

Specifically, the ways in which people structure narrative *content* through coherence (Baerger & McAdams, 1999), linguistic content (Chung & Pennebaker, 2012), narrative tone (McAdams et al., 2001), and frame (McAdams et al., 2001) affects and reflects the sense they have made of their difficult experiences. Narrative theorizing asserts that the ways in which individuals create and assign positive or negative qualities to an event conveys the overall sense they make of that event. Further, individuals' psychological and physical well-being is affected and reflected in the content of their stories as well (e.g., Baerger & McAdams, 1999; Koenig Kellas, 2005; Koenig Kellas & Manusov, 2003; McAdams, 1993; McAdams et al., 2001). Thus, as a foundation to the investigation on the way that daughters' stories of difficulty are constructed and modified in and through interpersonal communication, the first hypothesis investigates the nature of daughters' story *content* and its relation to well-being. Thus, the following hypothesis is presented:

H₁: The degree to which daughters (a) create coherence, (b) incorporate affect and cognitive mechanism words, (c) use positive tone, and (d) construct a redemptive

frame in their stories of difficulty will be positively related to changes in their well-being over time.

Although much narrative research focuses on the cognitive nature of narrative sense-making, story construction and storytelling are largely interpersonal *processes*. There is much evidence that narrative sense-making leads to well-being in storytellers, yet little research examines the relationship between interpersonal communication and individual sense-making. Emotional support research helps to explain the ways in which relational partners assist each other in coping with difficult experiences (Burleson, 1994; Goldsmith, 2004). Supportive behaviors that encourage talk and freely expressed emotion are more likely to lead to increased well-being in the distressed individual (Burleson, 1994; Folkman et al., 1986; Lazarus & Folkman, 1984). Because discussing her difficult story will likely heighten the daughter's emotional needs, her mother is likely to enact emotional support behaviors to help her daughter process her difficulties (Fisher, 2010).

Studying both daughters' perceptions of mother communicated emotional support and the behavioral components of emotional support – empathy, facework, perspective-taking – provides a specified, multi-faceted and communication-focused operationalization of emotional support. Investigating the behavioral elements of social support provides a direct assessment of the effectiveness of communication taking place in the support context, and builds upon previous literature in social support as well. Indeed, “actions, rather than relationships, convey support” (Burleson, 1994, p. 67). Effective emotional support predicts numerous psychological and physical outcomes in distressed individuals, and ineffective or lack of emotional support during difficult experiences can lead to increased emotional trauma (see Burleson & MacGeorge, 2002

for review). Further, since the mother-daughter relationship is one of the most important sources of support in women's lives (Hunter & Youniss, 1982) and women adhere to their mothers messages of support (Gottlieb & Mendelson, 1990), support within the mother-daughter dyad is especially influential to daughters' well-being. Thus, in an effort toward understanding the ways mother support behaviors relate to daughter well-being and sense-making within the narrative sense-making process, the second hypothesis is posed:

H₂: Daughters' perceptions of their mothers' social support behaviors will positively predict daughter well-being.

Whereas past research has supported the assumption that support providers' behaviors predict increased well-being in the distressed individual, researchers are largely unaware of the ways in which interpersonal communication behaviors may affect sense-making in individuals coping with stressful experiences. There is some evidence that story change, rather than overall narrative construction or emotionality, may be an important predictor of well-being when telling a difficult story over time (Pennebaker, 1993). Likewise, appraisal theorists assert that re-appraisal (or sense-making change) leads to positive outcomes mitigating the stress associated with difficult experiences (Jones & Wirtz, 2006; Lazarus & Folkman, 1984).

Taken together, social support researchers and narrative scholars can jointly recognize that individuals make sense of their experiences through interpersonal communication (e.g., Koenig Kellas, 2008), and particularly in social support contexts (e.g., Burleson, 1990). Yet, researchers have yet to investigate the ways that interpersonal communication about a difficult event may predict narrative sense-making change. This

information will provide researchers and practitioners with knowledge of the cognitive and interpersonal mechanisms that contribute to progression in narrative sense-making over time. Further, since difficult experiences are often discussed between mothers and daughters (Fischer, 1986; Miller-Day, 2004; Tannen, 2006), studying (re)appraisal (or narrative sense-making) in this context will grant ecological validity and methodological strength to the study of appraisal. Above and beyond the inherent change in sense-making over time found in expressive writing studies (Frattaroli, 2006), mothers' supportive behaviors will likely contribute to the process by which daughters construct and change their narratives of difficulty. Thus, the final two hypotheses are posed:

H_{3a}: Daughter sense-making quality will increase over time.

H_{3b}: Perceived quality of mothers' social support will positively predict change in daughters' sense-making over time.

CHAPTER TWO

METHOD

The primary goal of the current dissertation was to assess the ways daughters' narrative sense-making changes over time and as a result of mothers' communicated support behaviors. Grounded in the expressive writing paradigm (Koenig Kellas et al., 2012; Pauley, Mormon & Floyd, 2011; Pennebaker, 1993), the narrative study of lives (e.g., McAdams, 1993), and literature on social support (e.g., Burleson, 2006) including appraisal theory (Lazarus, 1991, 1999), the present study sought to investigate the way narrative sense-making (H_1) and mother social support (H_2) predicts daughter well-being, the progression of daughter narrative sense-making over time (H_{3a}), and the influence of effective mother social support on daughter sense-making over time (H_{3b}). Addressing the proposed hypotheses will illuminate the degree to which mothers' behaviors predict changes in daughters' narrative sense-making over time. The current chapter details and explains the methodology employed in order to test these hypotheses. Specifically, the sample and sampling procedures are detailed, along with the procedures, measures, and data analyses employed in this quasi-experimental design.

Participants

Participants of the current study were 67 mother and daughter pairs willing to discuss a difficult situation in the daughter's life. Daughter participants were women 18 years old or older (as approved by the University of Nebraska-Lincoln's human subjects board), and whose mother was willing and able to participate in a video-taped interaction with her daughter about a difficult event in the daughter's life. Sixty-two mother-

daughter pairs completed the experiment in its entirety, and thus their data were analyzed in the current study (see discussion of attrition in Chapter Three).

The daughters ranged in age from 18 to 33 years ($M = 20.45$, $SD = 3.10$) and were mostly sophomores in college ($n = 29$, 46.8%). There were eleven first-year students (17.7%), ten juniors (16.1%), eight seniors (12.9%), three graduate students (4.6%), and one did not specify her year in college (1.6%). The majority of the daughters identified as Caucasian/White ($n = 56$, 90.3%), with two identifying as Hispanic (3.2%), and one as Asian American, African American/Black, Hispanic/White, and Asian American/White (1.6%, respectively). Mothers ranged in age from 40 to 66 ($M = 49.19$, $SD = 5.46$), and fifty-two identified as Caucasian/White (83.8%), one as Black/African American and White (1.5%), one as Asian American (1.5%), one as Black/African American (1.5%) one as European American (1.5%), and six did not identify a race/ethnicity (9.0%). Sixty-mother-daughter pairs were biological, one was adoptive, and one was a stepparent/stepchild relationship.

Several techniques were used to recruit mother-daughter participants. First, the recruitment script (Appendix A) was posted to the UNL Communication Studies research participation website (www.unl.edu/cs) and shared with students in college classrooms. Second, snowball sampling was employed to promote the study through personal and professional networks. Third, the study was promoted to female social groups in the Lincoln community (e.g., a local church's Woman's Board) and on UNL's campus (e.g., sororities). Students from the University of Nebraska-Lincoln received extra credit at their instructors' discretion. Those participants not eligible to earn extra credit, including mothers, were entered into a raffle for gifts certificates to local restaurants.

Procedures

Interested participants (daughters or mothers) scheduled an appointment for their mother-daughter interaction through email with the primary investigator (Appendix B). After a meeting time was established, the women were then emailed the informed consent form to read and (electronically) sign before participating in the study (Appendix C). The data collection took place over several time points, as describe below. Although mothers also completed a number of measures during the course of the study, mothers' data were not analyzed in the dissertation; therefore only daughters' data are described below.

Pre-interaction survey. Once their lab appointment was scheduled, mothers and daughters were independently sent, via e-mail, a link to a pre-interaction survey containing the informed consent form and a series of scales. Daughters' surveys contained demographic items and the Life Experience Questionnaire (LEQ; Lyumbomirsky et al., 2006), which solicited three difficult life stories and her evaluations of each (described below). The primary investigator evaluated the daughters' LEQ data to select the story to which she would write about throughout the study and tell to her mother at Time 2. Daughters were informed of the story selected when they were contacted with the Time 1 survey. If daughters did not wish to discuss the selected story with their mother, they were assigned another story of difficulty based on information provided in their Life Experiences Questionnaire, as discussed below ($n = 2$). At this time, mothers also completed measures not relevant to the current study.

Time 1. Two days before the mother-daughter appointment, daughters were emailed a survey eliciting the story about their difficult experience chosen during the pre-interaction process, and information about their current well-being. In accordance with

the expressive writing paradigm (Berry & Pennebaker, 1993; Frattaroli, 2006; Pennebaker 1992), daughters were asked to write out their difficult story, or “the story of a difficult experience that is currently bothering you” and told to “be as complete as possible when writing out your story, including relevant ‘characters,’ settings, and plotlines, just as you normally would when telling this story” (See Appendix E for detailed instructions). Instructions were adapted from Koenig Kellas et al.’s (2009) study on jointly-told stories of stressful experiences. After daughters wrote out their story, they completed measures of well-being, including mental health (Mental and Physical Health Scale; Dornbusch, Mont-Reynaud, Ritter, Chen & Steinberg, 1991) and positive and negative affect regarding the difficult experience (Positive and Negative Affect Schedule; Watson, Clark, & Tellegen, 1988). These procedures and measures were replicated during Times 3 and 4. All measures are described below and presented in Appendix D.

Time 2. At Time 2, daughters told their stories of difficulty to their mother and then reported on their perceptions of their mothers’ support behaviors (see Appendix E for Procedure Script). Consistent with previous research, mother-daughter participants came to the Social Interaction Lab two days after Time 1 (Fratarolli, 2006; Koenig Kellas et al., 2012) in order to engage in an interaction regarding the daughter’s difficult experience. Upon arriving to the research lab, participants were reminded of the informed consent form they completed online in the pre-interaction survey and provided a copy if requested. They were then instructed on their task: The daughter was asked to discuss the difficult experience that she wrote about in her Time 1 survey. In accordance with past research on disclosure of difficult experiences (Frattaroli, 2006; Koenig Kellas, et al.,

2012), the daughter was instructed (by the researcher and in written directions) to discuss their difficult experience with their mother:

As you talk about your difficult experience, I would like for you to talk about your very deepest thoughts and feelings about the experience you selected. As you tell your story, I would like you to really let go and explore your very deepest emotions and thoughts. You might tie your experience to your relationships with others, including your parents, romantic partners, friends or relatives, to your past, your present, or your future, or to who you have been, who you would like to be, or who you are now (adapted from Koenig Kellas et al., 2012; Lyubomirsky et al., 2006; Pennebaker & Francis, 1996).

In conjunction, the mother was given the following verbal and written instructions:

As your daughter talks about her difficult experience, I would like you to listen and interact as you normally would if she were to tell you a story such as this. In other words, there is no right or wrong way to interact: you are free to talk, ask questions, interject, or keep quiet, etc. The point is for you to interact how you normally would if she was telling this story in a place where you typically get together (adapted from Koenig Kellas et al., 2012; Lyubomirsky et al., 2006; Pennebaker & Francis, 1996).

Then, the participants were left alone and the researcher turned on the digital video camera. In line with expressive writing studies, (Frattaroli, 2006), the women in the current study discussed the daughter's difficult experience for 15 minutes. This time mandate allowed partners to engage in meaningful discussion about the daughters' problem, yet maintained uniformity among participants' conversations.

Once the participants completed their discussion, they were separated and asked to complete an online survey. The daughter completed measures of her mother's social support behaviors including empathy (Interpersonal Reactivity Index; Davis, 1983) perspective-taking (Other Perspective-Taking Scale; Koenig Kellas, et al., 2012), facework (Perceived Face Threat; Cupach & Carson, 2002), and emotional support (Communication-Based Social Support; Weber & Patterson, 1996). She also reported upon mental health (Dornbusch, et al., 1991) and positive and negative affect surrounding the difficult experience (Watson et al., 1988). Mothers completed surveys on measures that were beyond the scope of the present dissertation.

Time 3. Time 3 repeated the format of Time 1. As is consistent with expressive writing research, (Frattaroli, 2006) the daughters were given with follow-up surveys two days after the mother-daughter interaction in the research lab. The online survey again elicited daughters' written story of the difficult experience, measures of mental health (Dornbusch, et al., 1991) and positive and negative affect surrounding the difficult experience (Watson et al., 1988).

Time 4. Finally, in order to measure changes over time, the final assessment occurred three weeks after the mother-daughter interaction in the research lab. Expressive writing researchers generally agree that an immediate follow-up survey inflates the effect size of the relationship between variables and only captures the immediate (and often negative) emotional reaction to the expressive writing exercise (Frattaroli, 2006); thus, administering follow-up surveys both shortly after the intervention (Times 2 and 3) and three weeks later (Time 4) allowed the assessment of short-term and long-term effect sizes of the mother-daughter interaction. As in Times 1 and 3, the survey elicited

daughters' written story of difficulty, and contained measures of mental health (Dornbusch, et al., 1991) and positive and negative affect surrounding the difficult experience (Watson et al., 1988).

Measures

The following measures assessed the daughters' difficult life experiences, perception of mother social support and well-being. Mother social support was assessed through the indicators of perceived empathy, perspective-taking, face threat, and communication-based emotional support. Daughters' well-being was indicated by mental health and positive and negative affect toward the difficult event (see Appendix E for each measure).

Difficult life experience. Daughters' difficult experiences were collected and evaluated through the Life Experiences Questionnaire (Lyumbomirsky et al., 2006). Through the LEQ, daughters listed three "difficult experiences that have occurred in [their] lifetime" and then rated the experiences on five 10-point Likert-type items, including the recency of the experience (e.g., "How recent was this experience?"), how upsetting the experience was (e.g., "How upsetting is this experience currently?"), perceived resolvability of the issue (e.g., "Is this experience resolvable?"), time spent engaging with others about the experience (e.g., "How much time have you spent talking out loud to others about this experience?"), and the perceived significance of the event (e.g., "How significant is this experience in your life?"). Higher scores indicated higher levels of each construct. The average amount of time since the difficult experience was 3.16 years ($SD = 3.09$). Participants reported their experiences as moderately upsetting ($M = 6.72$, $SD = 2.35$ on a 10-point scale), moderate-to-highly significant ($M = 8.17$, SD

= 2.07), and somewhat unresolvable ($M = 4.49$, $SD = 3.00$), and participants had already spent a moderate amount of time talking aloud to others about the difficulty ($M = 6.17$, $SD = 2.27$, 1 = *none (time)*, 10 = *a lot (of time)*). Difficult experiences reported included loved one's poor health or death ($n = 14$, 22.6%, e.g., "death of my grandpa"), life changes and transitions ($n = 11$, 17.7%, e.g., "moving away from home"), school and grades ($n = 10$, 16.1%, e.g., "test anxiety"), family tensions and issues ($n = 10$, 16.1%, e.g., "mom disapproving of my boyfriend"), break-ups ($n = 8$, 12.9%, e.g., "break-up with my first boyfriend"), friend problems ($n = 6$, 9.7%, e.g., "roommate conflict"), and personal (mental and physical) health problems ($n = 3$, 4.8%, e.g., "dealing with depression"). After participants completed the LEQ in the pre-interaction survey, the researcher selected the story that was rated the most recent, upsetting, resolvable, infrequently discussed, and significant for the participant to tell over the course of the study.

Social support behaviors. Researchers have called for social support to be measured through multiple indicators in order to elicit a more holistic picture of support communication in interpersonal relationships (Burleson, 1994; Rushton, 1980). Further, assessing multiple support behaviors in an interaction will provide researchers with knowledge on the unique ways certain mother support behaviors are associated with daughter sense-making and well-being. As such, daughters' perceptions of mothers' social support at Time 2 were assessed through daughters' other-report measures of their mothers' empathy, perspective-taking, facework, and social support. Descriptive statistics and reliability statistics for each measure of social support can be found in Table 1.

Empathy. Daughters' perceptions of their mothers' empathy was assessed using the empathic concern subscale of the Interpersonal Reactivity Index (IRI; Davis, 1983), a self-report scale of dispositional empathy. For the present study, the scale was revised to be an other-report measure (i.e., daughters reported on mothers' behaviors). The empathic concern subscale of the IRI assesses one's overall, global tendency to adopt others' emotions and to experience sympathy and compassion for others; thus it was revised to focus on the specific mother-daughter conversation at Time 2 (e.g., "She had tender, concerned feelings for me"). Seven items were assessed on a five-point Likert-type scale (1 = *did not describe her well*, 5 = *described her very well*), and three items were reverse-coded so that higher scores represented higher rates of empathy. Items were averaged to create an overall score of participants' perceptions of their mothers' empathic communication. Similar to previous research ($\alpha = .77$; Davis, 1983) the scale was reliable in the present study (see Table 1).

Perspective-taking. Daughters' perceptions of mothers' communicated perspective-taking were assessed through the Other Perspective-Taking Ability Scale (Koenig Kellas et al., 2012), a 19-item, measure investigating the participant's perception of their relational partner's (i.e., their mother's) perspective-taking behaviors. Using a five-point Likert-type scale (1 = *strongly disagree*, 5 = *strongly agree*), daughters identified the extent to which their mothers exhibited perspective-taking behaviors. Items include "my mother was attentive to me during our conversation" and "my mother helped me say what I wanted to say." Six items were reverse-coded, and then items were averaged to create an overall score for daughters' perceptions of their mothers' perspective taking behaviors, with higher scores indicating higher estimations of their

mothers' perspective-taking abilities during the conversation. Previous studies have reported adequate reliability ($\alpha = .85-.90$, Koenig Kellas et al., 2012), which parallels the current study's reliability analyses (see Table 1).

Facework. Daughters' perceptions about their mothers' ability to uphold the daughters' positive and negative face was assessed by Cupach and Carson's (2002) Perceived Face Threat Measure. This bi-dimensional, 14-item, 5-point Likert-type scale (1 = *strongly disagree*, 5 = *strongly agree*) contains items asking participants to rate the extent to which their relational partner exhibited face-saving or face-threatening actions. Ten items measure positive face threats, and four measure negative face threats. Daughters assessed the extent to which, during the interaction, their mothers were "hostile" (positive face threat) and "invaded my privacy" (negative face threat), for example. Four items were reverse-coded so that higher scores indicated daughters' perceptions of more face-threatening behavior by their mothers. Past research has supported the reliability of this instrument (e.g., Cupach & Carson, 2002, $\alpha = .88$ positive face threat, $\alpha = .68$ negative face threat). In the present study, adequate reliability was established after dropping three items from the positive face subscale ("showed disrespect toward me," "strengthened the relationship between us," and "was tactful") and one item from the negative face subscale ("constrained my choices) (see Table 1).

Communication-based emotional support. Daughters' perceptions of mothers' emotional support behaviors were assessed through the Communication Based Emotional Support Scale (CBES; Weber & Patterson, 1996). This 13-item, unidimensional measure elicits the participant's perception of her mother's concern, compassion, sympathy, esteem, and helpfulness through a five-point Likert-type scale (1 = *almost never true*, 5 =

always true). The daughters were asked to think about the social support behaviors exhibited by their mother as they told their stories. Items included: “She showed genuine concern for my problems,” “When we talked about my problem, she didn’t seem to be paying attention,” and “She helped me cope with my problems.” Three items were reverse-coded, and then items were averaged to create a composite variable with higher scores indicating greater perceived communication-based emotional support. Reliability analyses indicated strong reliability for the instrument in the current study (see Table 1), as did previous research (e.g., Rittenour & Martin, 2008, $\alpha = .93$).

Well-being. In the present dissertation, daughter well-being was assessed through three indicators: overall mental health and positive and negative affect specific to the difficult situation.

Mental health. First, daughters completed the Mental Health subscale of the Mental and Physical Health Scale (Dornbusch, et al., 1991). The subscale measures mental health symptoms using nine items on a 3-point Likert-type scale ranging from *never once* (1) to *three or more times* (3). Items refer to mental and physical behaviors that indicate mental health problems including crying, restlessness, irritability, and general sadness. Participants indicate the response most accurately describing their state of mind during the past week. Items include “felt over-tired,” “felt nervous or worried,” and “felt tense or irritable” and higher scores indicate greater levels of distress. Items were averaged to create a composite score for daughter mental health symptoms. Past research has found strong reliability for the measure (e.g., Schrodtt & Ledbetter, 2007, $\alpha = .81$), as did the present study (see Table 1).

Positive and negative affect. Second, daughters were asked to complete a measure of positive and negative affect regarding their difficult experience. The revised Positive and Negative Affect Schedule (PANAS; Watson et al., 1988; Willer & Cupach, 2008) contains 22 items asking participants to rate on a 5-point Likert-type scale (1 = *very slightly to not at all*, 5 = *extremely*) how they currently felt about their difficult event, where higher scores indicate greater degree of positive or negative affect. Nine items assessed positive affect, and 13 items measured negative affect, and composite scores were created by summing the items together from each respective scale. Emotions assessed included “enthusiastic” (positive affect) and “distressed” (negative affect). The current study produced reliable results (see Table 1), as has past research with this scale (e.g., Willer & Cupach, 2008, $\alpha = .85$).

Table 1. *Descriptive Statistics for Daughter Well-Being and Mother Support Variables*

Variable	Time	<i>M</i>	<i>SD</i>	α
Empathy	Time 2	4.19	.58	.80
Perspective-Taking	Time 2	4.45	.37	.84
Positive Face Threat	Time 2	1.50	.38	.68
Negative Face Threat	Time 2	1.24	.41	.78
Emotional Support	Time 2	4.52	.45	.86
Mental Health Symptoms	Time 1	1.94	.58	.76
	Time 2	1.82	.63	.84
	Time 3	1.76	.60	.82
	Time 4	1.85	.60	.83
Positive Affect	Time 1	29.81	7.25	.81
	Time 2	31.31	8.50	.89
	Time 3	27.29	9.07	.91
	Time 4	26.35	8.77	.91
Negative Affect	Time 1	20.36	7.36	.85
	Time 2	15.68	6.02	.87
	Time 3	16.19	6.85	.91
	Time 4	15.17	6.10	.89

Data Analysis

In order to measure narrative sense-making, written narrative responses from Times 1, 3, and 4 were analyzed through four indicators of narrative sense-making: narrative coherence, narrative tone, narrative frame, and linguistic content. By analyzing and comparing only the written accounts of daughters stories of difficulty (Times 1, 3, and 4), and not spoken stories (Time 2), the current study mimics, and therefore maintains consistency with, research in the expressive writing paradigm (Pennebaker, 1993), which assesses story change and well-being over time in either written or spoken accounts, but not a combination of both (Fratarolli, 2008). Analyzing story change over

time in both written and spoken stories may yield results attributable to the storytelling method, rather than to change in sense-making over time. Instead, written stories were analyzed over time, and the daughter's spoken story served as a primer for the interaction and an assessment of mother support behaviors at Time 2.

Narrative coherence. Narrative coherence was assessed through Baerger and McAdams' (1999) narrative coherence rating scheme. This rating scheme presents four categories of narrative coherence – Orientation, Structure, Affect, and Integration – which are rated on a 7-point Likert-type scale (1 = *very low*, 7 = *very high*) (see Appendix E). Specifically, *Orientation* refers to the narrator's abilities to situate the narrative in specific temporal, social, and personal context, and to describe the circumstances surrounding and main characters involved in the story. *Structure* assesses the narrator's adherence to the structural elements of the story, presented in a temporally logical way and including an initiating event, an internal response to the event (e.g., a goal or plan); an attempt (e.g., attempt to reach a goal), and a consequence. *Affect* indicates the narrator's use of emotion (i.e., drama, tension, humor and pathos) to create and emphasize an evaluative point about the story. *Integration* evaluates the way in which the narrator expresses the meaning of the story within the context of the larger life story, integrating any disparate story elements together.

Two independent research assistants, unaware of the current study's hypotheses, were trained to assess narrative coherence of the written stories using the Baerger and McAdams (1999) rating scheme. Research assistants completed training wherein they were provided operational definitions and exemplars of stories with high, moderate and low coherence (see Appendix E for full Narrative Sense-Making Rater Training Manual).

The research assistants then practiced rating five stories, discussing any inconsistencies in responses, and then rated ten independently. Once adequate interrater reliability was established, each assistant analyzed the entirety of the data. Interclass correlations were calculated across 62 participants' three stories ($n = 181$ stories, accounting for five missing participant stories) and revealed adequate to excellent interrater reliability (Orientation = .73, Structure = .80, Affect = .69, Integration = .89, Overall Coherence = .92), which is similar to previous research using this scheme (Orientation $\alpha = .77$, Structure $\alpha = .79$, Affect $\alpha = .84$, and Integration $\alpha = .82$, Overall Coherence $\alpha = .80$; Baerger & McAdams, 1999). The raters' scores were averaged to create a score for each coherence indicator (See Table 2 for means and standard deviations of all narrative sense-making variables). Consistent with past literature on narrative coherence (LeClair-Underberg, 2008; McAdams et al., 2001), coherence indicators then were averaged to create an overall coherence score for each Time (see Table 2) ($\alpha = .90$) with higher scores reflecting more coherent narratives.

Table 2. *Descriptive Statistics for Narrative Sense-Making across Time*

Variable	Time	<i>M</i>	<i>SD</i>	<i>n</i>
Narrative Coherence	Time 1	4.00	1.36	
	Time 3	3.00	1.44	
	Time 4	2.77	1.43	
Narrative Tone	Time 1	1.95	.58	
	Time 3	2.01	.53	
	Time 4	2.02	.52	
Positive Emotion Words	Time 1	2.33	1.28	
	Time 3	2.02	1.49	
	Time 4	2.25	2.32	
Negative Emotion Words	Time 1	2.14	1.36	
	Time 3	2.60	1.73	
	Time 4	3.45	4.44	
Cognitive Mechanism Words	Time 1	17.60	3.18	
	Time 3	17.75	4.95	
	Time 4	16.60	5.80	
Narrative Frame (<i>n</i> = Contaminated, Ambivalent Redemptive)	Time 1			33, 6, 25
	Time 3			37, 4, 19
	Time 4			37, 3, 20

Narrative tone and narrative frame. Narrative tone was assessed using a scale developed for the current dissertation, and based on past literature (McAdams, et al., 1997). McAdams et al. (1997) used a single-item on a five-point semantic-differential scale (1 = *very unhappy* to 5 = *very happy*) to assess narrative tone. In that study, stories were also coded for the presence or absence of joy and excitement (positive tone) and sadness and fear (negative tone). Based on McAdams et al.'s measures, a single-item, five-point semantic-differential scale (1 = *very negative* to 5 = *very positive*) was created for the current study in order to assess the overall narrative tone within daughters' stories.

“Very negative” stories were defined as those with “negative tone,” or those who have a depressed, despondent, or gloomy feel; “Very positive” stories were operationalized by those stories with “positive tone,” or that are cheerful, glad, or content with their experience.

In order to assess narrative frame (i.e., redemptive and contamination sequences), a measure was created for the current study based upon past narrative sense-making research (Koenig Kellas et al., 2009; McAdams et al., 1997). For the single-item measure, redemptive sequences were defined as “those (stories) that end on a positive note, especially if the storyteller describes their experience as overall negative or beginning negatively.” Contaminated sequences were considered “those that the storyteller begins in a positive or neutral way, and concludes the story in a negative light.” Those stories that were “neither particularly redemptive nor contaminated” were coded as Ambivalent (Koenig Kellas et al., 2009). Each of the daughters’ stories was given a narrative frame code, including Redemptive, Contaminated, or Ambivalent.

Research assistant training procedures were similar to those used for narrative coherence, and the same assistants were used for both analyses. Assistants were provided with operational definitions of narrative tone and narrative frame, and then practiced analyzing five stories. The assistants then rated and coded the entirety of the narrative data ($n = 181$ stories) and achieved acceptable interrater reliability, as assessed through interclass correlations (Narrative tone = .79) and Cohen’s kappa (Narrative frame = .78). Each story was assigned one narrative frame score, and the primary researcher resolved any discrepancies in narrative frame scores ($n = 6$) (See Table 2 for frequencies of each code).

Linguistic content. The final indicator of narrative sense-making was linguistic content. This construct was analyzed through a text analysis application in the Linguistic Inquiry and Word Count (LIWC) software program developed by Pennebaker and Francis (1996). The LIWC is a word counting program that uses a dictionary of grammatical, psychological and content word categories to identify words that underlie psychological states of an author (Chung & Pennebaker, 2012; Pennebaker & Francis, 1996). The software was developed in order to test for the “factors [that] could account for the health and psychological changes associated with putting emotional upheavals into words” (p. 207). The LIWC codes words into approximately 80 categories; those relevant to the current study include positive emotions, negative emotions, and cognitive mechanism categories (i.e., causal words, insight words). As discussed in Chapter One, these categories were chosen because research in the expressive writing paradigm indicates that these language categories are particularly predictive of well-being over time (e.g., Pennebaker, et al., 1997). The output received from the LIWC is a matrix of text files with each of the LIWC dictionary word categories as columns and the percentage of total words in a file belonging to a particular category in each of the matrix’s cells (Pennebaker, et al., 2007). Thus, each story was assigned a ratio score for each sense-making word category (i.e., positive emotion, negative emotion, cognitive mechanism) of sense-making word to overall word count. Analysis of the current data indicate that daughters’ stories ranged from 4 to 923 words ($M = 204.98$, $SD = 164.49$) and used, on average, 2.22% ($SD = 1.76$) positive emotion words (e.g., “happiness”, “optimism”), 2.71% ($SD = 2.88$) negative emotion words (e.g., “sad”, “angry”), and 17.23% ($SD = 4.90$) cognitive mechanism words (e.g., “because”, “know”).

Chapter Summary

The current study's four hypotheses were analyzed through a quasi-experimental design consistent with research in the expressive writing paradigm (e.g., Frattaroli, 2006; Koenig Kellas et al., 2012; Pauley et al., 2011). Daughters wrote stories of difficulty and completed measures of well-being twice within one week (Times 1 and 3), and once in a three-week follow-up (Time 4). They also engaged in an interaction with their mothers at Time 2, wherein they discussed their story of difficulty and then completed measures of well-being and perceptions of mother social support. Well-being was assessed through constructs of overall mental health (Dornbusch, et al., 1991) and positive and negative affect regarding the difficult experience (Watson et al., 1988); and mother social support was assessed through measures of empathy (Davis, 1983), perspective-taking (Koenig Kellas, et al., 2012), facework (Cupach & Carson, 2002), and emotional support (Weber & Patterson, 1996). Narrative sense-making was measured through the observational rating and coding of coherence (Baerger & McAdams, 1999), tone (McAdams et al., 2001), frame (McAdams et al., 1997), and linguistic content (Pennebaker et al., 2007). The next chapter describes the results of the descriptive and inferential analyses conducted to test the relationships between changes in daughter sense-making, mother social support, and well-being over time.

CHAPTER THREE

RESULTS

The present dissertation investigates the way daughters' narrative sense-making and well-being change over time, particularly as a function of the quality of mother support behaviors. This chapter provides an overview of the statistical analyses performed to test the hypotheses presented in Chapter One. First, given the nature of this longitudinal, quasi-experimental design, analyses on participant attrition are discussed. Then, findings are presented from descriptive and inferential statistical analyses used to address the current study's hypotheses, including the relationship between daughters' narrative sense-making and their well-being (H_1), the connection between mother social support behaviors and daughter well-being (H_2), and the way in which daughters' narrative sense-making changed over time (H_{3a}) depending upon their mother emotional support behaviors (H_{3b}). Means and standard deviations of emotional support, well-being, and narrative sense-making variables are reported in Tables 1 and 2.

Participant Attrition

Of the 67 daughters who completed the pre-interaction survey, which included the LEQ and demographic items, 64 participants completed the Time 1 survey, which included their written story of difficulty and measures of well-being. Because daughters' stories were not collected in the pre-interaction survey, the three participants who only completed the pre-interaction survey were not included in the final analysis. Further, two additional participants were eliminated from the final analysis because one did not participate in the mother-daughter interaction at Time 2, and thus she did not provide

mother social support data, and one did not participate in Time 3 or Time 4, and thus she only provided one story of difficulty (at Time 1).

Of the remaining 62 participants, three did not participate in Time 3, but did participate at Time 4, and two completed Times 1-3, but did not participate in Time 4; this resulted in a total of five participants who completed two of the three storywriting exercises. Past expressive writing research has indicated that individuals who participate in two of three storytelling exercises still receive positive benefits from the storywriting treatment (Frattaroli, 2006; Pauley et al. , 2011). Thus, in order to determine the equivalency between participants who completed two story writing exercises ($n = 5$) and those who completed all three exercises ($n = 57$), a series of independent samples t-tests were conducted on narrative sense-making variables – coherence, tone, frame, positive emotion, negative emotion, and cognitive mechanism words – at Time 1. Consistent with Pauley et al. (2011), sense-making was assessed at Time 1 in order to compare the participants before they underwent the series of expressive writing exercises.

Findings from the t-tests demonstrated no significant differences between those participants who completed three writing exercises and those who completed two exercises on measures of coherence, $t(60) = -1.04, p > .05$, tone $t(60) = .56, p > .05$, positive emotion words $t(60) = -.36, p > .05$, negative emotion words $t(60) = .62, p > .05$, and cognitive mechanism words $t(60) = -.12, p > .05$. A chi-square analyses was conducted for the categorical variable narrative frame, and also revealed no significant difference between the two groups, Pearson $\chi^2(2, n = 62) = .74, p > .05$. The non-significant findings on all comparisons of the narrative outcome variables show that it

was appropriate to retain all 62 participants who completed two or more storywriting exercises (Frattaroli, 2006; Pauley et al., 2011).

Hypothesis 1: Narrative Sense-Making and Well-Being

To address the first hypothesis (“The degree to which daughters (a) create coherence, (b) incorporate affect and cognitive mechanism words, (c) use positive tone, and (d) construct a redemptive frame in their stories of difficulty will be positively related to changes in their well-being over time”), a series of multiple regressions were conducted with coherence, tone, frame, positive and negative emotion words, and cognitive mechanism words at Time 1, Time 3, and Time 4 (the time points at which written narratives were collected) as the independent variables and changes in positive affect, negative affect, and mental health symptoms as the respective dependent variables. In order to assess the categorical variable narrative frame within the multiple regression analyses, the variable was dummy coded: (1) Contaminated, (2) Ambivalent, (3) Redemptive.

To address participants’ change in well-being outcomes over the course of their study, change scores were calculated for each of the well-being variables – positive affect, negative affect, and mental health symptoms – by subtracting participants’ Time 4 scores from their Time 1 scores. The choice to use change scores was consistent with extant expressive writing paradigm research investigating lasting effects of expressive/narrative writing over time (e.g., Frattaroli, 2006; Pauley et al., 2011; Pennebaker et al., 1997). Positive change scores indicated an increase in positive affect, negative affect, or mental health symptoms over time; negative change scores indicated that these outcome variables decreased over time. Participants without Time 4 scores ($n =$

2) were omitted from the change score creation. In the current study, participants' positive affect ($M = -3.59$, $SD = 8.55$), negative affect ($M = -4.62$, $SD = 6.02$), and mental health symptoms ($M = -.09$, $SD = .48$) all decreased over time.

A total of nine multiple regressions were run to test Hypothesis 1. Independent variables were tested at each storywriting time (Times 1, 3, and 4) such that narrative sense-making variables – coherence, tone, positive emotion words, negative emotion words, and cognitive mechanism words – were predictor variables, and change in well-being – positive affect, negative affect, and mental health symptoms – were outcome variables. Time 2 was not included in the analysis as daughters told, but did not write, their stories at this point. Findings from these analyses illustrated how sense-making at each time point uniquely predicted the way well-being changes over time. In other words, these analyses showed if sense-making at a particular time point was more important in predicting changes in overall well-being across time than sense-making at other times. Preliminary correlations were conducted to analyze the interrelationships among narrative sense-making variables (See Table 3), and between narrative sense-making and well-being change variables (See Table 4).

Table 3. *Intercorrelations among Narrative Sense-Making Variables*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. T1_Coherence	1	.46**	.65**	-.04	-.11	-.12	.21	.05	.09	.09	-.11	-.09	.15	-.15	.26*
2. T3_Coherence		1	.48**	-.02	-.07	.07	.11	.36**	.14	-.15	-.10	-.15	.11	-.04	.07
3. T4_Coherence			1	.02	.14	.08	.26	.19	.24	-.11	-.09	-.26*	.13	.05	.30*
4. T1_Tone				1	.28*	.37**	.05	.05	.03	-.26*	-.12	.07	-.11	-.03	-.07
5. T3_Tone					1	.46**	.01	-.08	-.05	-.09	-.27*	.02	-.20	-.03	-.17
6. T4_Tone						1	-.10	.06	.27*	-.23	-.26	-.21	-.03	.33*	.06
7. T1_Pos. Emo. Words							1	.39**	.15	-.18	.06	-.16	.19	.21	.22
8. T3_Pos. Emo. Words								1	.26	.09	.12	.12	.20	.41**	-.08
9. T4_Pos. Emo. Words									1	-.31*	-.09	-.29*	-.09	.11	.26*
10. T1_Neg. Emo. Words										1	.25	.58**	.08	.14	-.21
11. T3_Neg. Emo. Words											1	.22	-.03	-.05	-.05
12. T4_Neg. Emo. Words												1	-.05	.05	.46**
13. T1_Cog. Mech. Words													1	.56**	.31*
14. T3_Cog. Mech. Words														1	.22
15. T4_Cog. Mech. Words															1

** . Correlation is significant at the $p < .01$ level (2-tailed).

* . Correlation is significant at the $p < .05$ level (2-tailed).

Table 4. *Intercorrelations between Narrative Sense-Making and Well-Being Change*

	1	2	3
1. Mental Health Change	1		
2. Positive Affect Change	-.26*	1	
3. Negative Affect Change	.19	-.20	1
T1_Coh_Total	-.04	-.01	-.08
T3_Coh_Total	-.07	-.22	.05
T4_Coh_Total	.03	-.17	.12
T1_Tone	-.06	-.19	.17
T3_Tone	.30*	-.23	.09
T4_Tone	.22	-.41*	.42*
T1_Positive Emo Words	.35**	-.16	-.26
T3_Positive Emo Words	-.00	-.13	.01
T4_Positive Emo Words	-.05	-.13	.22
T1_Negative Emo Words	.04	-.05	-.14
T3_Negative Emo Words	.01	-.06	-.14
T4_Negative Emo Words	.00	.08	-.15
T1_Cognitive Mech Words	.06	.11	.12
T3_Cognitive Mech Words	.24	-.27*	.16
T4_Cognitive Mech Words	.02	.02	.20

*Correlation is significant at the $p < .05$ level (2-tailed)

**Correlation is significant at the $p < .01$ level (2-tailed)

Time 1. Multiple regression analyses indicated that none of the Time 1 sense-making variables significantly predicted the change in participant well-being over time, including mental health symptoms ($F(7, 51) = 1.54, p > .05, R^2 = .18$), positive affect ($F(7, 50) = 1.10, p > .05, R^2 = .13$), and negative affect ($F(7, 50) = 1.39, p > .05, R^2 = .16$). Thus, daughters' narrative sense-making at Time 1 was not statistically related to changes in well-being over time (See Table 5 for beta weights of each predictor).

Time 3. The multiple regression model for positive affect at Time 3 approached significance, $F(7, 47) = 2.19, p = .052, R^2 = .25$. Contrary to the hypothesis, the use of cognitive mechanism sense-making words was a significant *negative* predictor in the model ($\beta = -.34, p < .05$), such that those participants who incorporated more cognitive mechanism words (e.g., “because,” “effect,” “consider”) into their stories of difficulty at Time 3 reported a decrease in positive affect across time. All other Time 3 regression analyses were non-significant, including outcomes of mental health symptoms ($F(7, 48) = 1.77, p > .05, R^2 = .21$) and negative affect ($F(7, 47) = 1.14, p > .05, R^2 = .15$).

Time 4. For Time 4, multiple regression analyses elicited models approaching significance for positive affect change ($F(7, 48) = 2.18, p = .053, R^2 = .24$) and negative affect change ($F(7, 48) = 2.07, p = .06, R^2 = .23$). Again, contrary to the hypothesis, tone was negatively related to positive affect change ($\beta = -.40, p < .01$), such that the more positive the narrative tone at Time 4 the bigger the decrease in the positive affect daughters reported over time. Likewise, narrative tone ($\beta = .40, p < .01$) and dummy-coded narrative frame ($b = -18.56, p < .01$)^a were significant predictors of negative affect over time. Based on these findings, those participants with more positive narrative tone at Time 4 reported increased negative affect over time, and those with stories containing redemptive sequences were likely to report decreased negative affect over time. The third regression at Time 4 indicated that change over time in mental health symptoms was not significantly predicted by narrative sense-making ($F(7, 49) = 2.00, p > .05, R^2 = .22$).

^a When testing dummy coded variables in a multiple regression, the b-weight (rather than the standardized β) should be reported (Garbin, 2012a). The b-weight represents the size and direction of the mean difference between the groups of the variable (i.e., contaminated, ambivalent, and redemptive stories in narrative frame). In multiple regressions, the β is a measure of the variable's standardized contribution to the model; but because dummy codes are arbitrarily assigned values (i.e., 1 = contaminated; 2 = ambivalent; 3 = redemptive), the standardized values are insignificant. Thus, the b-weights, rather than the standardized β , must be interpreted for a dummy coded variable.

Table 5. *Beta Weights in Multiple Regression Analysis for Narrative Sense-Making and Well-Being Change over Time.*

	Positive Affect Change		Negative Affect Change		Mental Health Change	
Time 1	β/b^a	p	β/b	p	β/b	p
Coherence	.04	.81	-9.68	.10	-.09	.51
Tone	-.19	.21	-.06	.67	-.02	.88
Frame: Redemptive	2.11	.81	-9.86	.40	-.45	.36
Frame: Ambivalent	4.14	.36	-1.10	.74	.06	.67
Frame: Contaminated	-2.32	.41	1.72	.36	-.26	.28
Positive Emotion Words	-.20	.15	-.26	.06	.40	.04
Negative Emotion Words	-.20	.25	-.12	.41	.05	.70
Cognitive Mech. Words	.10	.47	.22	.11	.03	.82

	Positive Affect Change [†]		Negative Affect Change		Mental Health Change	
Time 3	β/b	p	β/b	p	β/b	p
Coherence	-.20	.21	.12	.46	.07	.64
Tone	-.26	.08	.20	.20	.43	.01
Frame: Redemptive	17.88	.06	-12.16	.05	-1.62	.00
Frame: Ambivalent	3.00	.25	-7.57	.03	.22	.20
Frame: Contaminated	6.43	.19	-1.47	.51	.07	.82
Positive Emotion Words	.13	.42	-.10	.55	-.09	.56
Negative Emotion Words	-.23	.12	-.07	.62	.12	.41
Cognitive Mech. Words	-.34	.02	.17	.28	.29	.05

	Positive Affect Change*		Negative Affect Change [†]		Mental Health Change	
Time 4	β/b	p	β/b	p	β/b	p
Coherence	-.17	.28	.05	.75	.26	.10
Tone	-.40*	.01	.40*	.01	.45	.00
Frame: Redemptive	10.62	.25	-18.56	.01	-1.71	.00
Frame: Ambivalent	.82	.80	.71	.76	.56	.00
Frame: Contaminated	6.88	.18	5.00	.17	.42	.15
Positive Emotion Words	-.03	.84	.08	.56	-.09	.50
Negative Emotion Words	-.02	.87	.01	.95	.04	.81
Cognitive Mech. Words	.06	.70	.14	.35	.15	.34

[†] Model or predictor approaching significance. * $p < 0.05$ level. ** $p < 0.01$ level.

^a The dummy coded narrative frame variable will be reported as b-weights, rather than β weights. See footnote 1.

Summary. Hypothesis One was partially supported in that narrative sense-making at Times 3 and 4 were marginally predicted well-being change over time, yet most often in the opposite direction as expected. Specifically, the use of cognitive mechanism words at Time 3 predicted a decrease in positive affect over time, and incorporating positive tone at Time 4 also predicted a decrease in positive affect over time. Likewise, those who wrote stories reflecting a positive tone at Time 4 were likely to experience an increase in negative affect over time. The only effect consistent with H₁ predictions was that those with redemptive sequences at Time 4 also experienced a decrease in reported negative affect over time.

Hypothesis 2: Mother Social Support and Well-Being

To address Hypothesis Two (“Daughters’ perceptions of their mothers’ social support behaviors will positively predict daughter well-being.”), a series of multiple regressions were planned for mother social support indices – empathy, communicated perspective-taking, emotional support, and positive and negative face threats – as the independent variables, and daughter well-being at Time 2 – positive and negative affect, and mental health symptoms – as the dependent variables. Analyzing well-being at Time 2 (the time point at which mothers and daughters engaged in a conversation about the daughters’ difficulty) allows for an assessment of daughter well-being and her mother’s behaviors at the time when daughter reported upon both constructs. Because well-being was measured immediately after the interaction, a daughter’s scores at Time 2, rather at Time 3 or 4, are the most immediate indication of her well-being in concert with her mother’s social support behaviors.

Despite planned multiple regressions, intercorrelations between mother support independent variables (see Table 6) suggested problems with multicollinearity in the proposed model. According to Tabachnick & Fidell (2007), multicollinearity occurs when the predictor variables in a model are highly correlated, and thus unable to distinctly and independently contribute to the prediction of the outcome variable. Multicollinearity causes problems in multiple regressions because it heightens the risk of null wash-out (Garbin, 2012b). Null wash-out occurs when a model is saturated with (many) interrelated predictors, and thereby each produces a very minimal independent contribution to the criterion variable. Thus, the F-test, which assesses the average contribution of the predictors to the outcome variable, will elicit a very low score and produce statistically non-significant findings.

Table 6. *Intercorrelations among Mother Social Support and Well-Being Variables at Time 2*

	1	2	3	4	5
1. Empathy	1	.59**	.64**	-.27*	-.31*
2. Perspective-taking		1	.76**	-.54**	-.63**
3. Social Support			1	-.45**	-.62**
4. Pos. Face Threat				1	.59**
5. Neg. Face Threat					1

** . Correlation is significant at the 0.01 level.

* . Correlation is significant at the 0.05 level.

In order to cope with multicollinearity and null wash-out, Garbin (2012b) recommends beyond running analyses on a larger sample, either eliminating predictors from the model or conducting bivariate regressions. Because of the theoretical importance of each predictor (as established in Chapter One), all mother social support variables were retained. Instead, a series of bivariate regressions were conducted with each mother support variable as the independent variable and the daughter well-being at Time 2 as the outcome variable. Bivariate regressions allowed for an analysis of the unique contributions of these related, but distinctly different, mother social support constructs. Overall, the findings described below indicate several significant relationships between mother social support and daughter well-being.

Positive affect. Specifically, bivariate regressions with daughters' self-reported positive affect about the stressor at Time 2 as the dependent variable produced significant models for the following predictors: mother empathy ($F(1, 54) = 5.02, p < .05, R^2 = .09, \beta = .29$), communicated perspective-taking ($F(1, 54) = 9.62, p < .01, R^2 = .15, \beta = .39$), and emotional support ($F(1, 56) = 13.74, p < .001, R^2 = .20, \beta = .29$). Positive face threats ($F(1, 55) = 1.77, p > .05, R^2 = .03$) and negative face threats ($F(1, 56) = .75, p > .05, R^2 = .12$) were not significant predictors of daughter positive affect at Time 2. Thus, those daughters who reported that their mothers communicated with higher levels of empathy, communicated perspective-taking, and emotional support were likely to report higher levels of positive affect at Time 2.

Negative affect. Bivariate regressions indicated that perspective-taking ($F(1, 58) = 7.08, p < .01, R^2 = .11, \beta = -.33$) and negative face threats ($F(1, 60) = 7.37, p < .01, R^2 = .11, \beta = .33$) significantly predicted daughters' self-reported negative affect at Time 2.

Models for mother empathy ($F(1, 58) = .08, p > .05, R^2 = .001$), emotional support ($F(1, 60) = 7.08, p > .05, R^2 = .05$), and positive face threats ($F(1, 59) = 1.42, p > .05, R^2 = .02$) were not significant in predicting daughter negative affect. As such, those daughters who reported greater mother perspective-taking were likely to report lower levels of negative affect at Time 2 and those who reported greater negative face threats from their interaction were likely to have higher negative affect at Time 2.

Mental health symptoms. Finally, results from bivariate regressions demonstrated no significant relationships between mother social support and daughter mental health symptoms at Time 2. Specifically, mother empathy ($F(1, 57) = .00, p > .05, R^2 = .00$), perspective-taking ($F(1, 57) = 1.60, p > .05, R^2 = .03$), emotional support ($F(1, 59) = .31, p > .05, R^2 = .01$), positive face threats ($F(1, 58) = .02, p > .05, R^2 = .00$), and negative face threats ($F(1, 59) = .38, p > .05, R^2 = .00$) did not significantly predict daughters' self-reported mental health symptoms at Time 2.

Summary. Hypothesis Two was partially supported for daughter positive and negative affect at Time 2. Findings indicated that those daughters with mothers who demonstrated empathy and social support also reported higher positive affect at Time 2. Those participants whose mothers engaged in perspective-taking during the mother-daughter interaction reported lower negative affect and higher positive affect at Time 2, and daughters who reported mother negative face threats were more likely to exhibit higher negative affect at Time 2.

Hypothesis 3a: Daughter Narrative Sense-Making over Time

Findings regarding Hypothesis One and Hypothesis Two extend previous research and help to explain the significant relationship between daughters' narrative sense-

making and well-being over time, and daughters' perceptions of mothers' social support and well-being, respectively. Yet no known research has investigated the impact of interpersonal communication on change in narrative sense-making over time. The current study redressed this gap by exploring the ways in which daughter sense-making about a difficult experience changed over time (H_{3a}) as a foundation for the later exploration of how that change was related to mother social support regarding the daughter's experience (H_{3b}).

H_{3a} ("Daughter sense-making quality will increase over time") was tested through a series of within-subjects repeated-measures ANOVAs, with time as the independent variable and narrative sense-making indicators as the dependent variables. In order to determine the interrelationships of the narrative sense-making indicators, correlations between narrative coherence, narrative tone, positive and negative emotion words, and cognitive mechanism words were conducted (see Table 3). Since the interrelationships between these sense-making variables were non-significant or weak, five repeated-measures ANOVAs, rather than MANOVAs (which account for intercorrelations of dependent variables; Green & Salkind, 2008; Tabachnick & Fidell, 2007), were conducted to address H_{3a} . In order to control for Type I Error, the Bonferroni method was employed, wherein the ANOVAs were tested at the $p = .02$ level (or $.05$ divided by the number of comparison groups or time points; $.05/3 = .02$) (Green & Salkind, 2008; Tabachnick & Fidell, 2007). See Figures 1a-e for mean differences over time.

Narrative coherence. The first repeated-measures ANOVA tested for significant changes in narrative coherence over the three narrative writing treatments (Times 1, 3, and 4). Findings demonstrated a significant difference in the coherence of daughters'

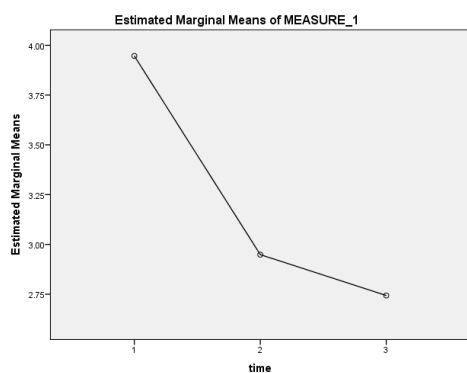
stories over time, $F(2, 108) = 28.79, p < .001, \eta^2 = .35$. Follow-up paired-samples t-tests were conducted using the Bonferroni method ($.05/3 = .02$) in order to explain the differences specified in the ANOVA main effect (Tabachnick & Fidell, 2007). Findings indicated a significant linear effect with means decreasing over time, with significant differences in coherence at Time 1 and Time 3 (Time 1 $M = 3.92$, Time 3 $M = 2.69, t(58) = 5.20, p < .01$), and between Time 1 and Time 4 (Time 4 $M = 3.00, t(57) = 7.61, p < .01$). Differences between Time 3 and Time 4 were non-significant ($t(54) = 1.90, p > .05$).

Narrative tone and positive emotion words. The second repeated-measures ANOVA, which investigated the change in narrative tone over time, was non-significant $F(2, 112) = .42, p > .05, \eta^2 = .07$. The third repeated-measures ANOVA, investigating use of positive emotion words over time, also yielded non-significant results, $F(2, 112) = .66, p > .05, \eta^2 = .01$. These findings indicated that there was no significant change in participants' narrative tone over Time 1 ($M = 1.96$), Time 3 ($M = 2.02$), and Time 4 ($M = 2.03$), nor their use of positive emotion words between Time 1 ($M = 2.39$), Time 3 ($M = 2.06$), and Time 4 ($M = 2.19$).

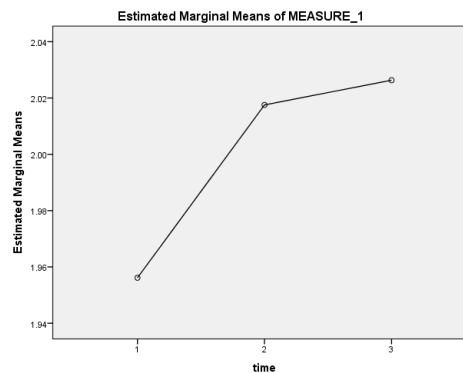
Negative emotion words. A fourth repeated-measures ANOVA was conducted to test change in participants' use of negative emotion words over time. Results indicated a significant difference in the amount of negative emotion words used, $F(2, 112) = 4.56, p < .05, \eta^2 = .08$. Follow-up paired-sample t-tests showed that participant use of negative emotion words significantly increased between Time 1 ($M = 2.13$) and Time 4 ($M = 3.55, t(59) = -2.74, p < .01$). Negative emotion words at Time 1 and 4 did not differ significantly from Time 3 ($M = 2.58$).

Figures 1a-1e. *Mean Differences for Narrative Sense-Making Variables over Time*

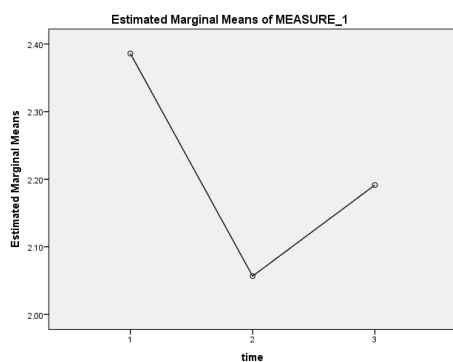
1a: Narrative Coherence*



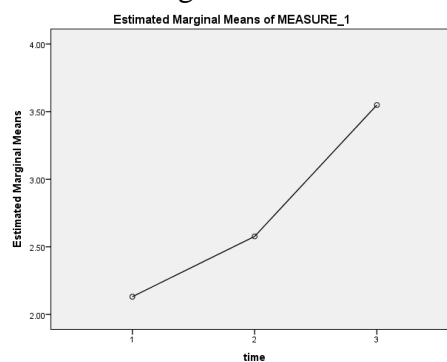
1b: Narrative Tone



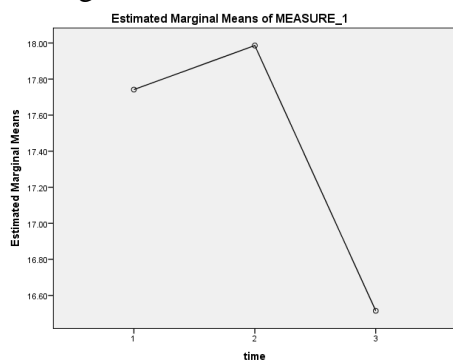
1c: Positive Emotion Words



1d: Negative Emotion Words*



1e: Cognitive Mechanism Words

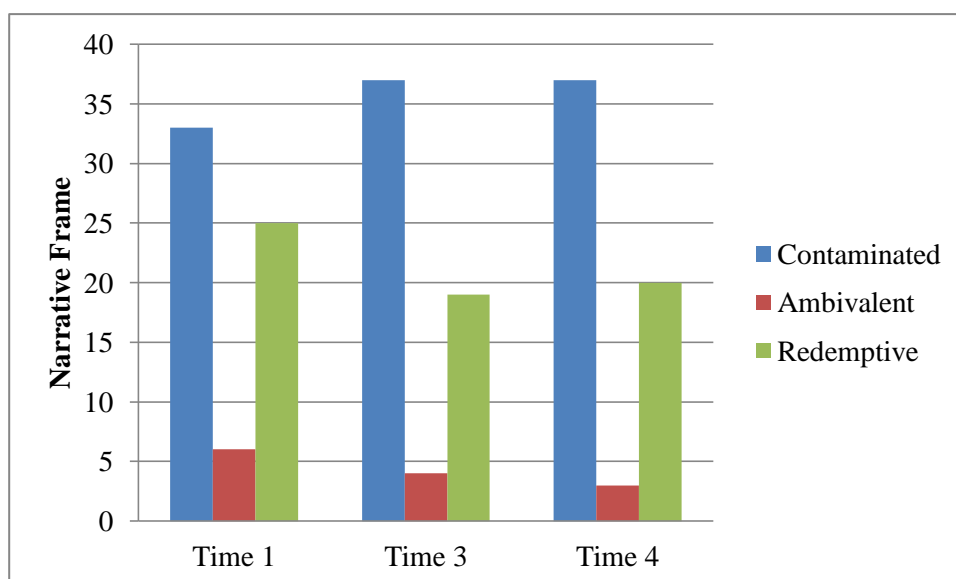


* Indicates a significant difference at the $p < .05$ level, as indicated by the repeated-measures ANOVA.

Cognitive mechanism words. The final repeated-measures ANOVA testing the differences in cognitive mechanism words used over time was non-significant, $F(2, 112) = 2.21, p \Rightarrow .05, \eta^2 = .04$. Thus, the use of cognitive mechanism words used at Time 1 ($M = 17.74$), Time 2 ($M = 17.99$), and Time 3 ($M = 16.51$) did not significantly differ.

Narrative frame. Because narrative frame was analyzed categorically, three Cochran's Q tests were conducted to test how participants' narrative frames – contaminated, ambivalent, and redemptive – changed over Times 1, 3, and 4 (See Figure 2 for frequency analyses). Cochran's Q analyzes the patterns of change between categorical variables over time (Garbin, 2012c; Green & Salkind, 2008). The result of the first test on contaminated frames shows no significant change over time, $Q(2) = 2.67, p > .05$. Thus, those who used a contaminated frame in their written stories tended to do so consistently over time. A similar non-significant pattern in change over time was found in the test for ambivalent ($Q(2) = 1.40, p > .05$) and redemptive frames ($Q(2) = 1.81, p > .05$). Thus, participants largely maintained the same narrative frame throughout the study.

Figure 2. *Frequency Analysis of Narrative Frame over Time.*



Summary. H_{3a} was partially supported in that daughters' narrative sense-making significantly changed over time. Specifically, participants' narrative coherence at Times 3 and 4 were significantly lower than at Time 1, and use of negative emotion words increased between Times 1 and 4. No significant differences were found in narrative frame, which indicates that participants largely did not change their narrative frame over time. These somewhat unintuitive results will be interpreted in Chapter 4. Whereas these findings demonstrate that daughter narrative sense-making changes over time, the next set of analyses investigates the ways mother social support may have influenced these changes.

Hypothesis 3b: Mother Support and Daughter Narrative Sense-Making over Time

In order to address H_{3b} , ("High quality of mother social support will predict an increase in daughter sense-making over time"), a series of bivariate regressions were conducted. In these analyses, mother social support (at Time 2) was the independent variable, and daughter sense-making change between Time 1 and Time 3 was the dependent variable. Multiple regressions were proposed to assess the change in narrative sense-making as a function of mother social support. Yet, as was the case in H_2 analyses, zero-order correlations indicated strong interrelationships between mother support variables (See Table 3) and thus there were concerns about multicollinearity and null wash-out in the multiple regression model (Garbin, 2012a; Tabachnick & Fidell, 2007). As such, bivariate regressions were conducted with mother social support as the independent variables and daughter sense-making change (T1-T3) as the dependent variables. Correlations between sense-making and support are presented in Table 7.

Table 7. *Intercorrelations Among Narrative Sense-Making Change Over Time (T3-T1) and Mother Social Support Variables*

Change Variables	1	2	3	4	5	6	7	8	9	10
1. Coherence Change	1	-.01	.36**	.18	.11	-.01	-.30*	.07	-.02	.12
2. Tone Change		1	-.07	-.20	.04	-.29*	.10	.44**	.11	.27*
3. Pos. Emo. Words Change			1	-.08	.21	.07	-.06	.06	-.11	-.13
4. Neg Emo. Words Change				1	-.07	.22	.00	-.22	-.13	-.19
5. Cog. Mech. Words Change					1	-.01	-.07	-.21	-.06	.04
6. Positive Face						1	.42**	-.46**	-.70**	-.68**
7. Negative Face							1	-.15	-.45**	-.49**
8. Empathy								1	.59**	.64**
9. Perspective-Taking									1	.76**
10. Social Support										1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Sense-making change between Time 1 and Time 3 was explored in order to most directly assess the change taking place in daughter sense-making in response to mother social support. Time 1 occurred two days prior to the mother-daughter interaction at Time 2, and Time 3 occurred two days following Time 2; thus, change between Time 1 and Time 3 was equidistant in time from the mother-daughter interaction. In conjunction with research that assesses outcome variables within a one-week period (e.g., Pauley et al., 2011), analyzing sense-making outcomes at Time 3 allows for a closer assessment of daughter sense-making based upon mother social support, rather than on other

uncontrollable confounding factors (e.g., discussing the problem with others) that are likely to occur by Time 4, three weeks after the mother-daughter interaction. Thus, change scores were calculated by subtracting daughter narrative sense-making variables – coherence, tone, positive and negative emotion words, cognitive mechanism words – at Time 3 from Time 1. Positive scores indicate an increase in narrative sense-making scores over time (i.e. more coherence, more positive tone, and higher rates of positive and negative emotion words and cognitive mechanism words)), and negative scores demonstrate a decrease in narrative sense-making scores over time. In the current study, and consistent with the findings from H_{3a}, two narrative sense-making indicators declined over time, including coherence ($M = -.92$, $SD = 1.36$), positive emotion words ($M = -.33$, $SD = 1.55$), and three increased over time, including tone ($M = .06$, $SD = .69$), negative emotion words ($M = .43$, $SD = 1.92$), and cognitive mechanism words ($M = .14$, $SD = 4.15$).

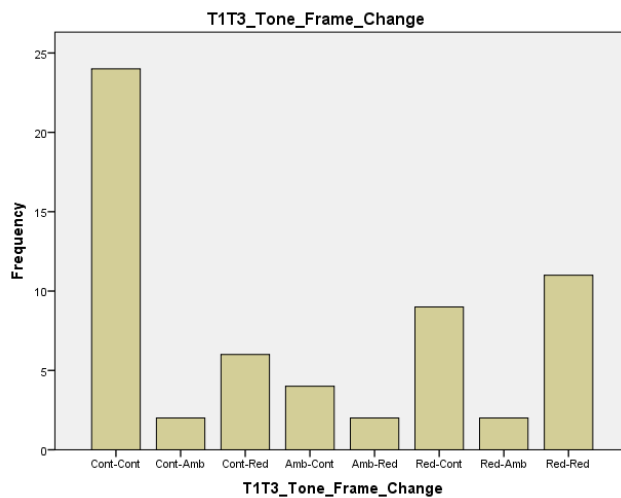
Change scores were created for narrative frame (a categorical variable) such that each participant was assigned a score that reflected the way her narrative frame changed (or did not change) between Time 1 and Time 3. Every daughter was designated a narrative frame score of 1 (Contaminated), 2 (Ambivalent), or 3 (Redemptive) for their stories at Time 1 and Time 3, respectively. A categorical score reflecting the nature of the change in frame (if any) was then assigned according to the change in narrative frame scores between Time 1 and Time 3. For example, if a participant's Time 1 narrative was contaminated and her Time 3 narrative was contaminated, she received a "1"; if a participant's Time 1 narrative was contaminated and her Time 3 narrative was ambivalent, she received a "2", and so on. See Table 8 for details of the coding scheme

and analyses of frequencies for narrative frame change variable. Figure 3 visually depicts frequency of narrative change between Time 1 and Time 3. Participants without Time 3 scores ($n = 3$) were omitted from the change score creation. Change scores for narrative sense-making variables were used in the following analyses as dependent variables.

Table 8. *Narrative Frame Change Coding Scheme and Frequency Analysis*

Code	Time 1 Frame	Time 3 Frame	<i>f</i>	<i>n%</i>
1	Contaminated	Contaminated	24	40.7
2	Contaminated	Ambivalent	2	3.2
3	Contaminated	Redemptive	5	8.1
4	Ambivalent	Contaminated	4	6.5
5	Ambivalent	Ambivalent	0	0
6	Ambivalent	Redemptive	2	3.2
7	Redemptive	Contaminated	9	14.5
8	Redemptive	Ambivalent	2	3.2
9	Redemptive	Redemptive	11	17.7

Figure 3. *Frequencies for Narrative Frame Change Variable over Time (T1-T3).*



Results from the bivariate regressions of narrative change and mother social support yielded partial support for H_{3b} (All statistics, including beta weights and p-values for the regressions, are presented in Table 9).

Narrative coherence. Bivariate regressions indicated that narrative coherence change over time was significantly predicted by mother negative face threats. Thus, daughters who reported higher rates of mother negative face threats during the mother-daughter interaction (Time 2) were likely to write narratives whose coherence decreased over time. Regression models for mother empathy, communicated perspective-taking, social support), and positive face threats on narrative coherence were non-significant.

Narrative tone. Bivariate regression analyses indicated that mother empathy, emotional support, and positive face threats significantly predicted narrative tone change over time. Specifically, those daughters who reported that their mothers exhibited higher levels of empathy and emotional support, and lower levels of positive face threats, also wrote narratives which became more positive in narrative tone over time. Daughters' perceptions of their mothers' perspective-taking and negative face threats did not significantly predict daughter narrative tone change over time.

Linguistic content. Bivariate regression analyses indicated that mother support behaviors did not significantly predict change in the remaining daughter linguistic content over time, including positive emotion words, negative emotion words, or cognitive mechanism words.

Table 9. *Bivariate Regression Analyses for Mother Social Support Quality and Narrative Sense-Making Change over Time*

Social Support Predictor	R^2	F	t	p	β
<u>Coherence</u>					
Positive Face Threat	.00	.01	-.09	.93	-.01
Negative Face Threat	.09	5.67*	-2.38	.02	-.30
Empathy	.01	.25	.50	.62	.07
Perspective-Taking	.00	.04	-.20	.84	-.03
Social Support	.02	.87	.93	.36	.12
<u>Tone</u>					
Positive Face Threat	.08	5.05*	-2.25	.03	-.29
Negative Face Threat	.01	.52	.72	.47	.10
Empathy	.20	12.95*	3.61	.001	.44
Perspective-Taking	.01	.61	.78	.44	.11
Social Support	.07	4.50	2.12	.04	.27
<u>Positive Words</u>					
Positive Face Threat	.01	.26	.51	.62	.07
Negative Face Threat	.00	.19	-.43	.67	-.06
Empathy	.00	.21	.45	.65	.06
Perspective-Taking	.01	.69	-.83	.41	-.11
Social Support	.02	1.02	-1.01	.32	-.13
<u>Negative Words</u>					
Positive Face Threat	.05	2.90	1.70	.09	.22
Negative Face Threat	.00	.00	.03	.98	.00
Empathy	.05	2.77	-1.67	.10	-.22
Perspective-Taking	.02	.87	-.94	.35	-.13
Social Support	.04	2.05	-1.43	.15	-.19
<u>Cognitive Mechanism Words</u>					
Positive Face Threat	.00	.01	-.07	.94	-.01
Negative Face Threat	.01	.27	-.52	.61	-.07
Empathy	.04	2.42	-1.56	.13	-.21
Perspective-Taking	.00	.21	-.46	.65	-.06
Social Support	.00	.07	.27	.79	.04

*. Model significant at the $p < 0.05$ level.

Narrative frame. To address change over time in narrative frame, a discriminant function analysis was conducted wherein mother social support indices were the predictor variables, and the categorical score calculated for the current analysis reflecting change in frame (if any) was the outcome variable. Analyses indicated that narrative frame did not statistically change over time as a result of mother social support, including mother empathy ($\Lambda = .60, \chi^2 (35) = .92, p > .05$), perspective-taking ($\Lambda = .82, \chi^2 (24) = 9.27, p > .05$), social support ($\Lambda = .94, \chi^2 (15) = 3.12, p > .05$), positive face threats ($\Lambda = .94, \chi^2 (8) = 1.21, p > .05$), or negative face threats ($\Lambda = .99, \chi^2 (3) = .34, p > .05$).

Summary. H_{3b} (“The quality of mother social support will predict changes in daughter sense-making over time”) was partially supported such that mother empathy, social support, and negative and positive face threats at Time 2 predicted changes in narrative coherence and narrative tone over time. Specifically, mothers’ use of negative face threats predicted decreases in daughters’ narrative coherence over time. Also, daughters’ perceptions of mothers’ empathic and emotionally supportive communication at Time 2 predicted increases in their positive narrative tone over time; and conversely, those daughters’ perceptions of mothers’ use of positive face threats at Time 2 predicted more negative narrative tone over time. Change in the remaining narrative sense-making change variables – narrative frame, positive and negative emotion words, and cognitive mechanism words – was not significantly predicted by the quality of mother social support.

Chapter Summary

The current chapter described the statistical analyses employed to test the hypotheses presented in Chapter One. Findings from the present dissertation

demonstrated partial support for all four hypotheses (see Table 10 for summary of findings). Notably, narrative sense-making at Times 3 and 4 predicted well-being change over time, yet largely in the opposite direction as hypothesized (H_1). Findings also showed a relationship between mother support behaviors and daughter well-being (H_2). Analyses on narrative sense-making over time indicated a significant change in negative emotion words and narrative coherence, although in opposite direction as hypothesized (H_{3a}), and mother support behaviors of empathy, social support, and negative and positive face threats predicted change in narrative coherence and narrative tone in daughters narratives between Times 1 and 3 (H_{3b}). Implications of these findings are explored in Chapter 4.

Table 10. *Summary of Findings from Hypotheses*

H ₁ :	The degree to which daughters (a) create coherence, (b) incorporate affect and cognitive mechanism words, (c) use positive tone, and (d) construct a redemptive frame in their stories of difficulty will be positively related to changes in their well-being over time.	Partially Supported	<p>T3 Cog. mech. words <i>negatively</i> → PA change (T4-T1)</p> <p>T4 Tone <i>negatively</i> → PA change</p> <p>T4 Tone → NA change</p> <p>T4 Redemptive frame → NA change</p>
H ₂ :	Daughters' perceptions of their mothers' social support behaviors will positively predict daughter well-being	Partially Supported	<p>Empathy → PA (at Time 2)</p> <p>Emotional support → PA</p> <p>Perspective-taking → PA</p> <p>Perspective-taking <i>negatively</i> → NA</p> <p>Negative face threat → NA</p>
H _{3a} :	Daughter sense-making quality will increase over time.	Partially Supported	<p>Coherence decreased (between T1 and T3, T1 and T4)</p> <p>Negative emotion words increased (between T1 and T4)</p>
H _{3b} :	High quality of mother social support will predict an increase in daughter sense-making over time.	Partially Supported	<p>Neg. face threats <i>negatively</i> → Coherence change (T3-T1)</p> <p>Empathy → Pos. tone change</p> <p>Emotional support → Pos. tone change</p> <p>Positive face threats <i>negatively</i> → Pos. tone change</p>

PA = Positive affect; NA = Negative affect

CHAPTER FOUR

DISCUSSION

The purpose of the present dissertation was to determine the connections between changes in daughters' narrative sense-making and their mothers' supportive communication during conversations about difficulty. To those ends, two bodies of literature – narrative theorizing and social support – were integrated to achieve two overarching goals. First, the current study sought to synthesize theoretical knowledge on social support and narrative theorizing in ways that redressed limitations in both bodies of scholarship. Appraisal theory (Lazarus, 1991, 1999) was employed to help explain the ways in which interpersonal communication may promote narrative sense-making, or (re)appraisal, for distressed individuals. Integrating appraisal theory and narrative theorizing offers narrative scholarship theoretical grounding (Koenig Kellas, 2008), and provides social support scholarship with an operationalization of (re)appraisal (Jones & Wirtz, 2006). Second, the present study also advanced narrative theorizing by examining change in narrative sense-making over time with respect to interpersonal communication. Narrative content (i.e., coherence, linguistic content, tone, frame) (Baerger & McAdams, 1999; Frattaroli, 2006; McAdams, et al., 2001) and changes in sense-making over time (Pennebaker et al., 1997) have been established as important indicators of psychological and physical health in distressed individuals. Yet, although narrative sense-making is an interpersonal endeavor (e.g., Koenig Kellas, 2008), past research has not investigated the process by which individuals' stories of difficulty change as a result of interpersonal conversations.

To address these goals, a longitudinal quasi-experiment with 62 mother-daughter pairs was conducted to test the relationship between mothers' social support and changes in the ways daughters narratively made sense of difficulty in their lives. Based on previous research, hypotheses posited that daughters' narrative sense-making would predict their well-being over time (H_1) and that the quality of mother social support would predict daughter well-being (H_2). The current dissertation extended previous research by investigating changes in daughters' narrative sense-making over time (H_{3a}) and how those changes were related to their mothers' social support behaviors during their conversation of difficulty at Time 2 (H_{3b}).

Findings demonstrated partial support for each of these hypotheses. Overall, narrative sense-making – specifically cognitive mechanism words, positive tone, and redemptive frame – predicted daughter positive and negative affect change over time (H_1), although cognitive mechanism words and positive tone functioned in the opposite direction as expected. Daughters' perceptions of mother empathy, perspective-taking, and emotional support positively predicted daughter positive affect at Time 2 (H_2). Likewise, mother perspective-taking predicted lower negative affect at Time 2, and negative face threats predicted higher negative affect. Additionally, daughters' narrative sense-making significantly changed during the study such that narrative coherence decreased over time and daughters' proportional use of negative emotion words increased over time (H_{3a}). Finally, daughters who perceived that their mothers were empathic and provided higher levels of emotional support during their conversation at Time 2 also wrote stories that became more positively valenced over time; on the other hand, the more they thought their mothers threatened their positive face, the more negative the tone of their story

became, and the more they perceived their mothers as threatening their negative face, the less coherent their stories became over time (H_{3b}). These results indicated that daughters' perceptions of their mothers' communicated support were important in explaining changes in the narrative meaning daughters made over time.

The current chapter will explore the implications of the present study's findings. First, results are discussed light of past research and theorizing on narrative sense-making, social support, appraisal theory, mother-daughter communication, and the expressive writing paradigm. Second, limitations and subsequent directions for future research are presented along with potential theoretical and applied applications relevant to the present study's findings.

Narrative Sense-Making as a Process

Building on existing theorizing in narrative sense-making and expressive writing, the present study examined the nature of narrative sense-making over time and in relation to changes in daughter well-being (H_1). Past research on narrative sense-making has highlighted the importance of the *content* of individuals' stories in processing and coping with their difficult experiences. Specifically, coherence, linguistic content, tone, and frame have been found to predict coping, well-being, and even personality traits of the storyteller (Baerger & McAdams, 1999; Chung & Pennebaker, 2012; Koenig Kellas & Manusov, 2003; McAdams et al., 2001). Yet, narrative sense-making is a *process* that happens over time (Pennebaker, 1993). Research emerging from the expressive writing paradigm, for example, suggests that changes in the linguistic content of a story over time predicts well-being in storytellers (Pennebaker, 1992; Pennebaker & Stone, 2003).

The present study tested the ways that narrative sense-making indicators (i.e., coherence, linguistic content, tone, and frame) at Times 1, 3, and 4 predicted well-being over time, as measured by change scores calculated between Time 1 and Time 4. As expected, change scores demonstrated that negative affect and mental health symptoms decreased over time; and, contrary to expectations and most expressive writing research (Fratraroli, 2006), positive affect decreased over time as well. One plausible explanation for the decrease in positive affect (and possibly negative affect) is that participants experienced an overall dulling effect from the expressive writing treatment. In other words, through writing and talking about their experience four times, perhaps daughters progressively felt less emotionally intense about the stressor, as assessed through both positive and negative affect. Watson et al. (1988) describe high positive affect as “a state of high energy, full concentration, and pleasurable engagement,” (p. 1063) whereas they explain low positive affect as largely lethargic and unenthused. Thus, repeatedly writing and talking about the stressor at length may have reduced participants’ energy and enthusiasm toward it. Further, results from the current study’s LEQ (Lyubomirsky et al., 2006) indicate that daughters spent a moderate amount of time ($M = 6.17$, $SD = 2.27$ on a 10-point scale, 1 = *no (time)*, 10 = *a lot (of time)*) talking about their experience prior to the expressive writing/talking treatment. Since participants had previously processed their experience with others, perhaps writing about it (twice – at Time 1 and Time 3) and talking about it (once – at Time 2) caused them grow disinterested in the experience, and this related to decreased positive affect about the story. Extended research is needed to understand if this decrease in emotional intensity represents a calming effect or a disengagement from the expressive writing treatment. Further, future research should

investigate the differences between people whose emotions are heightened by the expressive writing/talking treatment (i.e., positive and negative affect increases), and those whose emotions are dimmed (i.e., positive and negative affect decreases).

Hypothesis One tested whether or not these changes in well-being were significantly predicted by narrative content. Results demonstrated narrative sense-making at Time 1 did not uniquely contribute to well-being change during the study, whereas sense-making at Times 3 and 4 did predict change in well-being. The present section will discuss each of these findings in turn.

Narrative sense-making at Time 1. When considered independently, narrative sense-making at Time 1 did not predict changes in any of the well-being variables over time, including positive affect, negative affect, and mental health symptoms. Most expressive writing research indicates that participants benefit from writing over at least three consecutive days (Frattaroli, 2006), and thus this finding is not surprising. Time 1 serves as a baseline with participants writing their stories for the first time. Daughters had not yet talked with their mothers in the storytelling and expressive talking capacity at Time 2, or written out their stories at Times 3 and 4, therefore, they may not have yet had the opportunity to cognitively process and organize their life events narratively.

Narrative sense-making at Time 3. By Time 3, daughters had written their story twice (Time 1 and Time 3) and spoken with their mother about their difficulty (Time 2), and, at this time point, sense-making variables emerged as predictors of changes in well-being. Contrary to the assumptions of Hypothesis 1, however, the ratio of the cognitive mechanism words used at Time 3 negatively predicted positive affect change over time. In other words, those participants with a greater number of cognitive mechanism words,

relative to their total word count, at Time 3 also reported decreases in positive affect over the course of the study. This finding contradicts previous studies investigating cognitive mechanism words, which have found consistently that those who employ cognitive mechanism words in their stories (at any time point or increasing throughout time) are likely to demonstrate greater mental health (see Chung & Pennebaker, 2012). Chung and Pennebaker explain this connection by theorizing that the use of cognitive mechanism words (e.g., because, understand, consider, know) illustrates that participants have gained insight about the various elements of their story which in turns help them feel better.

One plausible explanation for this unexpected finding is that perhaps participants overanalyzed their stressor when expressively writing and talking about it. In their study on expressively writing/thinking about positive and negative experiences, Lyubomirsky et al. (2006) found that participants who wrote about their positive experiences over time also reported decreased environmental mastery, an indicator of well-being. Their explanation for this unexpected finding was that individuals may overanalyze or over-think their positive life events when they write them repeatedly over time, thus taking the joy out of them. Although the current study asked participants to write and talk about negative events, daughters similarly may have “over-processed” their negative experiences through expressive writing and talking during the study, causing their positive affect to decrease. Future research is needed to further investigate the factors that predict individuals’ tendencies to overanalyze both negative and positive experiences, and the psychological – and relational – outcomes associated with over-processing.

Narrative sense-making at Time 4. Analyses on daughter narrative sense-making and well-being at Time 4 indicated that narrative tone and redemptive frame both

predicted change in well-being over time. Specifically, contrary to the hypothesis, narrative tone negatively predicted positive affect change such that daughters who told positively-valenced stories were more likely to report a decrease in positive affect during the study. This finding may be attributed to the over-processing effect discussed above (Lyubomirsky et al., 2006). Even though participants were able to create a positively-valenced story at Time 4, they had already written/told their story three times prior (Times 1, 2, and 3). This repeated analysis of their experience, even if regarded positively, may have led to less positive affect toward the event. Likewise, given the bi-directionality of narrative tone and well-being (McAdams, 1993), perhaps participants experienced a decrease in positive affect, and this caused them to create more negatively-valenced stories by Time 4.

Similarly, narrative tone positively predicted negative affect change over time such that the more positively-valenced a daughter's story at Time 4, the more her negative affect increased over time. This finding is unexpected, given the strong theoretical and empirical connections between positive narrative tone and overall positive emotion and psychological well-being (Grossbaum & Bates, 2002; McAdams, 1993; McAdams et al., 2001). Yet, one plausible explanation of this finding can be explained through inhibition theory (Frattaroli, 2006). Researchers drawing upon inhibition theory (e.g. Francis & Pennebaker, 1992) posit that expressive writing studies provide participants with a venue to freely, and without social judgment, express their emotions and cognitions. During expressive writing treatments, participants should be able to fully experience and work through their (negative) emotions without regard to social pressures or stigma. Research has found that writing down one's negative feelings (rather than

merely thinking about them) helps thwart rumination about stressors and increase well-being (Lyubomirsky et al., 2006), which may suggest that writing down negative emotions helps storytellers to disinhibit from them and thus process their emotions.

In the current study, it may be that those who created positively-valenced stories remained inhibited from their expression of negative emotions, and thus did not fully process their frustration, guilt, fear, or anger surrounding their experience. Perhaps they felt social desirability pressure to create a positive story by Time 4, and thus constructed a positively-valenced story without necessarily working through their negative emotions surrounding the experience. This explanation may then help to explain these participants' increased negative affect toward their difficult event at Time 4. Conversely, those who created negatively-valenced stories may have been better able to disinhibit and work through their negative emotions narratively, which resulted in decreased negative affect toward the event. Future research should continue to explore the benefits and limitations of constructing positive stories from negative experiences in order to increase knowledge on techniques that help individuals cope with their difficult experiences.

Whereas findings on cognitive mechanism words at Time 3 and narrative tone at Time 4 were contradictory to the current study's hypotheses, analyses on narrative frame at Time 4 supported H₁. Results indicated that a redemptive narrative frame at Time 4 predicted a decrease in negative affect during the study. Grounded in the narrative study of lives, this finding supports current research on narrative frame that points to the psychological benefits of constructing redemptive stories (Koenig Kellas et al., 2009; McAdams et al., 2001). Those individuals who can frame their difficult stories redemptively benefit from higher levels of life satisfaction, life coherence, and self-

esteem, and generativity, or a desire to give of themselves to future generations (McAdams et al., 2001). These findings echo the results from the current study such that those daughters who were better at reappraising their difficulties by the conclusion of the written story also reported decreases in the intensity of their negative emotions about them. For example, the conclusion of participant #5D's story at Time 4 about her friends' suicides illustrates productive coping through a redemptive framework:

After Tommy died, I was inspired to reach out more to people and give them a chance, because you never know when they will need you the most. After Michael's death, I am more inspired to reach out and talk more about suicide prevention.

This participant's redemptive frame reflects the positive meaning she gleaned by the end of the study about her difficult experience, which should help to explain the decrease in negative affect intensity. Interestingly, redemptive frame only predicted well-being change at Time 4, rather than at Time 1 or Time 3. This may suggest that the way storywriters conclude their expressive writing treatments is more important than how they start. This preliminary finding extends the current literature on the narrative study of lives by suggesting that the way people develop their narrative frame over time predicts well-being progress. Future research should tease out the connections between narrative frame through time and well-being change.

Interestingly, the findings from H₁ demonstrate that, both negative tone and redemptive frames predict decreased negative affect in storytellers over time. Research in the study of narrative lives has found that narrative frame and tone often work together to represent and predict psychological well-being (McAdams et al., 2001; McLean & Pratt,

2006). Perhaps people who tell the most negative stories, but can reframe them by the end benefit most from expressive writing. The current study's preliminary finding supports inhibition theory by illuminating the benefits of processing negative emotions *and* supports cognitive processing theory by demonstrating the utility of organizing emotions into a redemptive framework.

Notably, although negative and positive affect were significant outcomes in the H₁ models, narrative sense-making did not predict mental health symptoms. Since mental health symptoms is a measure of global mental well-being (Dornbusch et al., 1991) and positive and negative affect refer to emotional evaluations of specific events (Watson et al., 1988), these findings point to the effects of expressive writing/talking on specific indicators of emotion surrounding a difficult experience (i.e., positive and negative affect), rather than overall well-being. This preliminary finding may suggest that expressive writing and talking benefits individuals struggling with (extreme) positive and negative emotions associated with a particular event (e.g., sadness after a loved one's death), rather than when they are facing a more global psychological issue (e.g., depression). Future research should investigate the ways expressive writing benefits global psychological well-being (i.e., mental well-being) and psychological well-being focused on specific issues (i.e., positive and negative affect).

In summary, analyses on H₁ demonstrated that narrative sense-making at Times 3 and 4 were related to participant positive and negative affect change over time. Narrative theorizing explains that narrative sense-making is not solely a cognitive act, but an interpersonal endeavor as well (e.g., Koenig Kellas, 2008). As such, the present study also investigated the process of narrative sense-making in the context of interpersonal

communication by testing the way mother-daughter social support quality predicted daughter well-being (H_2). The next section will explore the findings and implications surrounding Hypothesis Two.

Mother Social Support and Daughter Well-Being

Past research in social support has found that effective support behaviors such as perspective-taking, empathy, and facework promote coping and well-being in distressed individuals (e.g., Burleson, 1990). Similarly, the present dissertation found support for the hypothesis that mother support quality positively predicts daughter well-being (H_2). As expected, the quality of mothers' social support – specifically empathy, perspective-taking, and emotional support – positively predicted daughters' positive affect at Time 2. Findings also indicate that daughters' perceptions of mothers' perspective-taking predicted lower levels of negative affect. Moreover, daughters' perceptions about the degree to which their mothers threatened their negative face were positively related to daughters' negative affect at Time 2. By demonstrating the ways specific mother communication behaviors predicted daughter well-being in a social support context, these results supported and advanced theorizing on social support in the mother-daughter dyad. The current section will interpret each finding from H_2 in turn in order to elucidate the importance of these results in light of the mother-daughter dyad and social support interactions.

Mothers' support and daughters' positive affect. Specifically, mother empathy, perspective-taking, and emotional support positively predicted daughter positive affect about her difficult experience at Time 2. In other words, those daughters with mothers exhibiting higher levels of these behaviors were also more likely to report more positive

emotions about their stressor directly after the mother-daughter conversation. This finding supports current research in mother-daughter social support, and advances knowledge of communication within this influential relationship. Notably, although this dyad is often characterized by heightened conflict, intrusiveness, or exclusion (Fingerman, 1996; Miller-Day, 2004), benefits, particularly for daughters, exist as well. The current results suggest that mothers with effective support skills may be able to help facilitate daughters' positive evaluations of their negative events. Research on outcomes of the quality of mother-daughter support provides researchers with a deeper look at the effects of social support in families in particular (Burleson, 1994), and may help to inform interventions on social support as well (Goldsmith & Brashers, 2008).

Mothers' negative face threats and daughters' negative affect. However, although much of the present study's findings pointed toward supportive relationships between mothers and daughters, daughters also reported challenges in their mother-daughter dyad as well. Specifically, daughters' perceptions of the degree to which their mothers threatened their negative face, or autonomy, significantly predicted daughter negative affect at Time 2. As is common in social support contexts and in mother-daughter relationships (Goldsmith, 1994; Miller-Day, 2006; Trees, 2000), young adult daughters in the present study whose mothers threatened their negative face may have been concerned that their mothers were too demanding or forward with advice on how to resolve their problem. Thus, daughters may have become irritated with their mother or felt disempowered to solve their problem, which could explain the increase in their negative emotions about the stressor following the conversation. Indeed, roles in the mother-daughter relationship are dynamic and constantly changing over time, and

daughter young adulthood is particularly a period of transition for many mother-daughter dyads (Fischer, 1981, 1986; Miller-Day, 2006). Because the support data was only measured at one time point, and is therefore cross sectional, it may also be that daughters experiencing significant, intense negative affect were also more likely to feel that their autonomy was being threatened by their mothers. Future research should continue to tease apart the role of negative face in mother-daughter support interactions throughout various stages of the expressive writing treatment, and throughout the life course in order to understand the ways mother-daughter support changes and grow as women age.

Mothers' positive face threats and daughters' well-being. Although daughters' perceptions of the degree to which their mothers' threatened their negative face predicted negative affect, positive face threats did not emerge as significantly related to any indicator of daughter well-being at Time 2, as predicted in H₂. Goldsmith (1994) notes that support recipients may be concerned about their positive face, or the self-image one desires to project to the public (Brown & Levinson, 1987), when they worry that their problem may threaten their desired self-identity. Thus, the current study proposed that positive face threats would be detrimental to daughters' well-being. However, the non-significant relationship between positive face and daughter well-being in the current study may actually be a product of the nature of the mother-daughter dyad. The relationship between mothers and daughters is often one of the oldest and most deeply-seated in women's lives, and thus women often feel quite comfortable with their mothers (Miller-Day, 2006; Tannen, 2006). Daughters in the current sample were highly satisfied with their mother-daughter relationship ($M = 6.11$, $SD = .95$ on a 7-point scale) and reported low rates of positive face threats at Time 2 ($M = 1.50$, $SD = .38$ on a 5-point

scale). Thus, because the mother-daughter relationships in the current sample were relatively smooth and enjoyable and there was little variance in positive face threats, perhaps effective positive facework was the norm of their relationships (Cupach & Metts, 1994) and thus positive face threats may not have been a relevant factor in daughter coping.

In summary, the findings from the current investigation indicate that daughters' perceptions of their mothers' behaviors during conversations of distress predict daughters' well-being. Thus far, findings from the current study show that both daughter narrative sense-making and mother support behaviors predict variance in daughters' positive and negative affect about the stressor. Based on theorizing that points to the interpersonal nature of narrative sense-making (e.g., Koenig Kellas, 2008), analyses from H₃ investigated the ways mother support behaviors predicted changes in daughter sense-making over time.

Interpersonal Communication and Narrative Sense-Making Change

Narrative theorizing asserts that humans cognitively make sense of their world through story construction and storytelling (Bruner, 1990; Fisher, 1987); yet narrative sense-making is not an individual process, but one that takes place over time (Pennebaker, 1993) and through interpersonal communication (Koenig Kellas, 2008). Although research in the expressive writing paradigm shows that increased cognitive processing over time predicts increased well-being (Pennebaker et al., 1997) and narrative theorizing emphasizes the interpersonal nature of sense-making (Koenig Kellas, 2008), the influence of interpersonal communication on narrative sense-making change had not been previously explored. The current dissertation redressed this gap by

investigating daughter sense-making over time as a function of mother-daughter supportive communication. In other words, analyses tested how mothers' support behaviors predicted daughters' sense-making. As a foundation to this investigation, H_{3a} hypothesized that narrative sense-making would increase over time; and H_{3b} posited that narrative sense-making would change as a function of mother social support behaviors. Both hypotheses were partially supported, and implications are explored below.

Narrative sense-making change over time. Results indicated that daughters' narrative sense-making of their difficult experiences significantly changed over time. Specifically, narrative coherence decreased and negative emotion words increased throughout the study. The overall change in narrative sense-making supported the basic principles of the expressive writing paradigm and cognitive processing theory – writing out a story of difficulty over time facilitates cognitive change regarding the difficult experience (Fratraroli, 2006; Pennebaker, 2003). Yet, given that the theorizing in the narrative study of lives asserts that coherence represents a sophisticated level of sense-making (Baerger & McAdams, 1999; Gergen & Gergen, 1987) and that research in the expressive writing paradigm shows that writing stories over time facilitates increased sense-making and well-being (Fratraroli, 2006; Pennebaker, 1993), the decrease in coherence over time was unexpected. In order to illustrate this finding, Table 11, which is an example of a participant whose stories decreased in coherence over time, is provided. One plausible explanation for the decreasing coherence in this example and in this finding overall is that, based on the narrative writing design, participants did not allow themselves adequate writing time to construct a fully coherent narratives. In the current study, participants wrote out their story of difficulty three times through online surveys.

This research design allowed for participants to access the survey in a convenient and private way; yet this methodological design also decreased experimental control over the amount of time participants spent writing their story. In her meta-analysis of expressive writing studies, Frattaroli (2006) noted that participants must engage in 15 minutes of writing over at least three time periods to enjoy the benefits of expressive writing. In the present study, however, participants were not mandated to write their story for any amount of time. Thus, as the experiment progressed and the likelihood of participant fatigue increased, perhaps daughters wrote for less time, which stifled them from creating coherent stories. Daughters may have needed more time than they gave themselves to integrate Baerger and McAdams' (1999) elements of orientation, structure, affect, and integration into a whole and complete story. Participant #9D's progression of stories illustrates how participants may have decreased their attempts to fully explain story as the study progressed, potentially as a function of fatigue or lack of time. Thus, future research should encourage participants to write for a set amount of time (e.g., 15 minutes), even in online surveys, to ensure comparability and adequate opportunity to work through and make sense of difficulty.

Table 11. *Example Narrative Coherence Change Over Time (Participant #9D)*

Time 1	Time 2	Time 3
<p>Getting bad grades was never an issue for me. I was pretty much a straight A student all throughout high school. Once I came to college I realized that it took a lot more effort just get by with a B. My freshmen year I did well but so far as a sophomore it has been rough. I was expecting to get A's on most of my papers and tests. The first few weeks I studied and figured I knew mostly everything I needed to for tests and thought that my papers were well-written. But on my first test I got a C on which was very shocking to me. And on my first paper I also got a C. This all happened in the same week and became overwhelming. I told my mom I was going to drop out because I was upset. I was so sad and disappointed in myself. I do not think that she realizes how mad I was that I did not do well. Knowing that she does not care if I get a few bad grades but she wants me to keep my GPA high is helpful. After getting these few bad grades I always think that I never have time for anything and that I need to study in all of my free time just to get by with a B. Everyone else seems like they have time for all these fun activities but I am stuck inside trying to improve my grades which makes me depressed. Being sad all the time does not help me improve, it makes me think all the time about how I want to move back home. Getting these few bad grades has showed me that college is not that easy and it is going to take a lot more effort to reach my goals.</p>	<p>A difficult experience that I encountered in the past few weeks was received bad grades. I never had the issue of struggling with bad grades throughout high school or freshmen year. This semester has been more difficult then the past ones and has showed me that I need to study more and that it is not as easy as I thought it would be. I received a C on my first test and also on one of my first papers. Having such high expectations that I was going to do well made it a lot tougher to get over the feelings when I found out I did poorly. I am under large amounts of stress and pressure to get good grades. Sometimes I feel depressed because I never have time to do anything except work, study, and go to class. It makes me feel lonely when everyone else is out having fun and has time to do everything but I am stuck inside studying because of my goals to do well in school.</p>	<p>My difficult story was about getting bad grades. I have never struggled with getting bad grades. Even though I still did not do that bad, it still upsets me. Once I received my first paper and test back I got C's on both of them. I had high expectations and so once I found out it was hard on me. I am very stressed about getting bad grades and I want to do well.</p>

Results from H_{3a} also showed that the use of negative emotion words (e.g., “anxious,” “depressed,” “hate”) significantly increased over time, particularly between Times 1 and 4. It is not surprising that participants used negative emotion words when discussing their difficult story, as Kahn, Tobin, Massey and Anderson (2007) noted that negative events usually correspond with negative emotion words. However, the increase in negative emotion words is notable based on findings in past expressive writing literature. Researchers have found that the consistent use of a moderate amount of negative emotion words over time predicts increased well-being (Pennebaker et al., 1997), yet there is little support for the benefits of an *increase* in negative emotion words over time (e.g., Pennebaker & Francis, 1996). Since negative emotion words represent individuals’ “degree of immersion” in emotions such as anger, guilt, or sadness (Tausczik & Pennebaker, 2010, p. 32), the present study’s finding may illustrate that daughters became more highly involved in their negative emotions as the study progressed. Results are consistent with Holmes, Alperson, Ismailji, Classen, Wales, Cheasty, Miller and Koopman et al.’s (2007) study, which reported that participants increased their use of negative emotion words over time in order to work through their negative feelings. In the present study, daughters may have used the expressive writing treatments to purge or work through their negative emotions, which led to an increase of negative emotion words over time. This finding shows that individuals may choose to work through their negative emotions over time rather than forcing themselves to be positive.

In sum, H_{3a} was partially supported by daughters’ significant change in coherence and negative emotion words over time. Narrative tone, narrative frame, positive emotion words, and cognitive mechanism words, however, did not significantly change over time.

These non-significant findings may have been a result of a variety of factors, including the lack of a mandated time frame for writing (Frataroli, 2006) as discussed above.

Perhaps participants did not allow themselves enough time to develop particular parts of their sense-making through narrative, and their tone, positive emotion words, cognitive mechanism words and frame reflected this deficiency. Overall, the findings of change in coherence and negative emotion words demonstrated the effect of time on daughter narrative sense-making, yet did not account for any interpersonal influence on daughters' change in narrative processing. Thus, in order to fully understand the interpersonal processes at play when making sense of difficult experiences, H_{3b} investigated the relationship between mother social support and daughter narrative sense-making change.

Mother support predicting narrative sense-making change over time.

Analyses were conducted to investigate the way the mother-daughter interpersonal communication *process* predicts change in daughter narrative *content* (H_{3b}). Findings demonstrated support for the proposed hypothesis such that (a) daughters' perceptions of mothers' negative face threats negatively predicted daughters' coherence over time, and (b) daughters' perceptions of their mothers' empathy and emotional support predicted increased positivity in their narrative tone over time, whereas daughters' perceptions of their mothers' positive face threats predicted decreased positivity in narrative tone. Yet, (c) mother social support behaviors did not significantly predict linguistic content and narrative frame over time, as predicted. These three findings will be explored in light of their ability to advance literature on narrative sense-making and social support, particularly appraisal theory, in the mother-daughter context.

Change in narrative coherence. First, daughters' perceptions of mothers' negative face threats negatively predicted changes in narrative coherence over time. Coherence represents a sophisticated level of meaning-making about one's experience (Baerger & McAdams, 1999) and has been linked to well-being in storytellers (Baerger & McAdams, 1999; Koenig Kellas & Manusov, 2003; Smyth et al., 2001). Thus, when daughters perceived that their mothers threatened their negative face during the mother-daughter interaction, they also wrote less coherent narratives over time which could have limited their ability to cope effectively. Daughters may have been unable to freely discuss and process their experiences because they were concerned about their mothers' negative face threats (i.e., butting in, giving unwanted advice, constraining the daughters' independence).

Change in narrative tone. Daughters' perceptions of their mothers' empathy, emotional support, and positive face threats predicted change in narrative tone as well. As hypothesized, daughters' perceptions of their mothers' empathy and emotional support predicted positive change in narrative tone, and daughters' perceptions of the degree to which their mothers' threatened their positive face negatively predicted narrative tone over time. In other words, the more supported daughters felt by their mothers, the more positive the tone of their story became over time. McAdams (1993) theorized that narrative tone is an extension of one's overall beliefs in the nature of the social world, and Fiese and Sameroff (1999) stated that emotional tone is an interpersonally-focused indicator of narrative sense-making. It may be that feeling supported also increases one's positive outlook on even difficult events. The current study's findings reflect this

theorizing by illuminating the positive link between daughter narrative tone and the interpersonal communication between mothers and daughters.

Change in linguistic content and frame. Unexpectedly, mother social support indicators did not significantly predict any of linguistic content nor narrative frame. Since linguistic content indicators represent a micro-level of analysis, the non-significant connection between mother support and linguistic content might suggest that interpersonal communication helps to facilitate broader strokes of narrative sense-making (i.e., coherence and tone), rather than narrative sense-making at a micro level. Perhaps one conversation with their mother (at Time 2) did not facilitate enough change in daughters' sense-making to be captured in linguistic indicators. Future research should continue to test the relationship between interpersonal communication and linguistic indicators, particularly as they change over time and through numerous social interactions, rather than just one.

Additionally, analyses on narrative frame indicated that a majority of the participants maintained the same contaminated or redemptive narrative frame throughout the study. Although unexpected, this finding may be explained through the principles of narrative therapy (White & Epston, 2001). Narrative therapists posit that humans create their realities through constructing and telling stories, and that pathologies exist when these stories are tainted or negative. Thus, the objective of narrative therapy is to help individuals re-structure, or "re-story," their influential narratives into more productive and beneficial constructions. In the current study, mothers had the opportunity to help their daughters re-story their experiences through creating redemptive stories of their negative experiences. However, findings demonstrated that the mother-daughter

communication did not facilitate re-storying. It is likely that mothers did not approach the social support interaction with the goal of re-storying their daughters' narratives, and thus they were not focused in those efforts. Mothers likely do not possess the support and/or therapeutic skills to assist their daughters in re-storying their experience and change their narrative frame. In fact, McAdams' (1993) asserts that fundamental qualities of someone's life story, such as story theme, represent deep-seated and largely unchanging personality traits, values, and beliefs of an individual. Based on McAdams et al.'s (2001) work and findings of the present study, perhaps narrative frame is a fairly stable trait as well, and thus it is difficult to change within one interaction between mothers and daughters.

As a whole, analyses on sense-making change over time (H_{3a} and H_{3b}) showed that linguistic content and narrative frame remained fairly stable. Although interpersonal communication is a conduit of certain forms of narrative sense-making (i.e., coherence and tone), the current study's non-significant findings highlight some limitations of infusing interpersonal interactions into expressive writing experiments. As noted above, in their expressive writing study in friend pairs, Koenig Kellas et al. (2012) posited that adding interpersonal interaction to the expressive writing treatment may force the participant to engage in interpersonal "work" such as perspective-taking, listening, and empathizing with the other person, rather than having the freedom to tell their story uninhibited, as they would in a traditional expressive writing study. Perhaps daughters in the current study were unable to disengage and freely talk when telling their story of difficulty, and thus they did not reappraise their story through increased linguistic content and narrative frame over time.

Implications for linking appraisal theory and narrative sense-making. In

sum, daughters' change in narrative sense-making may be attributed, in part, to mother positive and negative face threats, empathy, and emotional support. These findings support the hypotheses guiding the present study and illustrate the ways that narrative theorizing, the expressive writing paradigm, and social support research can inform each other. Specifically, the principles of appraisal theory and narrative theorizing were bridged to inform and strengthen each other in two ways. First, appraisal theory and narrative theorizing informed each other conceptually. Since narrative sense-making research has been critiqued for being atheoretical (Koenig Kellas, 2008), appraisal theory provided a framework for understanding the mechanisms that individuals use to make sense of their experiences through interpersonal relationships. Likewise, since humans understand their lives through story (Bruner, 1990), narrative theorizing helped to explain the appraisal and reappraisal process as well. The current study's findings that sense-making change occurs over time and through interpersonal communication (H₃) supports the contention that humans interpersonally create and alter their understandings of their world (i.e., reappraise) through narratives (i.e., Koenig Kellas, 2005). The findings from the current study have implications for future theoretical and applied work in narrative theorizing and social support/appraisal theory, as explained in the proceeding section.

Second, the present dissertation advanced appraisal theory by operationalizing reappraisal as narrative change over time. Past research has measured reappraisal by eliciting the participants' self-perceptions of their reappraisal and emotional improvement (Jones & Wirtz, 2006), rather than tracking their appraisals or sense-making longitudinally. The current study's findings showed that participants' appraisals do

change over time (particularly through coherence and tone), and noted the positive relationship between competent interpersonal communication and that change.

Third, the current study provides one initial test of the appraisal model (Lazarus, 1991, 1999; Jones & Wirtz, 2006) in interaction and adds to it by demonstrating the ways in which reappraisal might be a narrative process. The appraisal model shows that effective social support encourages talk, which in turn enables positive (re)appraisal of stressful experiences, and which facilitates increased well-being (Lazarus, 1991, 1999; Jones & Wirtz, 2006). The current study supports this model by providing an empirically supported and more nuanced look at the *type* of talk that facilitates *narrative* reappraisal.

Specifically, the current study showed that when mothers avoided positive face threats and displayed emotional support and empathy, they facilitated talk and helped their daughters reappraise their experiences as more positively-valenced stories. Since narrative tone is an indication of narrators' emotional state (McAdams, 1993; Pennebaker et al., 1997), these findings help demonstrate the utility of both overall emotional support and specific mother support behaviors in reappraising *emotion* surrounding a difficult event. The connection between empathy and positive tone demonstrates that perhaps mothers validated their daughters' emotions, which helped them to process their negative feelings and create more positive stories over time. Likewise, avoiding positive face threats may have allowed daughters to feel secure in themselves and thus feel empowered to re-story their experience into something more positive.

Further, mother negative face threats also predicted a narrative construction element of sense-making – narrative coherence. Examining this finding inversely shows that mothers' negative facework (or respect for daughters' negative face) helped to

encourage talk and facilitate increased daughter coherence over time. This finding demonstrates that negative facework is an important element to reappraising narrative construction such that respecting distressed individuals' negative face creates enough space for them to construct increasingly coherent stories over time.

Interestingly, since negative face threats was the only social support indicator that predicted change in narrative coherence, perhaps the other indicators are more effective at facilitating reappraisal in the emotion-based indicators of narrative sense-making, such as narrative tone. It seems that avoiding negative face threats allows individuals to “work through” the structure of their story, whereas empathy, emotional support and avoiding positive face threats helps individuals explore their emotions through narrative. Future research should continue to test specific support behaviors in the narrative reappraisal process, and tease out the implications for the way certain types of social support (i.e., instrumental support, esteem support, Goldsmith, 2004) might relate to different dimensions of narrative sense-making. Further explaining the current study's findings, the next section will explore the limitations to the present dissertation and subsequent directions for future research.

Limitations and Further Directions for Future Research

Although the current study supported and advanced narrative and social support literature in various ways, limitations exist. First, the nature of the quasi-experimental design presented several challenges. As mentioned previously, unlike many expressive writing treatments (Frattaroli, 2006), participants were able to write for as much or as little time as they wanted. This lack of experimental control may have led to some of the non-significant or unexpected findings in the present study, such as a decrease in

narrative coherence over time (H_{3a}) and may have influenced the kind of sense-making that took place. Second, because the mother social support indicators – empathy, perspective-taking, face threats, and emotional support – were all highly correlated (see Table 7), multicollinearity occurred in the social support models (H_2 and H_{3b}). This multicollinearity can likely be attributed to the similarity in constructs between the support indicators. Future research should limit investigation to one or two support indicators and/or collect a larger data set in order to establish more statistical power (Garbin, 2012b).

Third, the sample and sampling procedures potentially accounted for several factors in current study's findings. Although experimental designs restrict sample size, particularly when testing dyads, a larger data set could be collected in future research. A larger sample would allow for more complex data analysis techniques such as structural equation modeling and growth curve analysis, which could potentially better account for change in sense-making criterion variables within the model (Kline, 2005).

Also, as is common when sampling college students, the participants were somewhat homogenous in age ($M = 20.45$, $SD = 3.10$) and race (Caucasian/White: $n = 56$, 90.3%). More importantly, however, the daughters were quite satisfied with their mother-daughter relationship ($M = 6.11$, $SD = .95$ on a 7-point scale) and reported upon their mothers' support behaviors very positively (see Table 1). This homogeneity restricted variance in the sample, which limited analytic possibilities such as splitting participants into groups, as is common in experimental design analyses (Green & Salkind, 2008; Tabachnick & Fidell, 2007) (e.g., based on level of satisfaction or support quality), to investigate differences in narrative sense-making between groups. Future

research should randomly and/or purposively sample in order to explore communication and sense-making in mother-daughter pairs with varying ages, ethnicities, relational satisfaction, and communication skills. Although the present study recruited within the community, future research should more strongly and pointedly recruit mother-daughter pairs in contexts outside of academia such as in churches and social services organizations (e.g., women's health clinics) in an effort to increase the diversity of the sample.

Interestingly, despite the relative homogeneity of the sample, the daughters' story topics were rather diverse. The themes of the stories included school and grades, family tensions and issues, love ones' poor health or death, life changes and transitions, break-ups, friend problems, and personal (mental and physical) health problems. The diversity of the stories was a strength by providing variability among the story types and experiences of the sample; yet, it was also a limitation by limiting consistency among participants. Other narrative sense-making studies have instructed their participants to discuss one type of story (e.g., a relationship break up, Koenig Kellas & Manusov, 2003) in order to maintain consistency within the sample. Future research might explore certain types of stories (e.g., stories about infertility) in the mother-daughter dyad to further understand the relational mechanisms of the narrative sense-making process in specific contexts.

Additional directions for future research. In addition to the potential lines of research discussed above, several directions for future research emerge from the present dissertation's findings. First, the current study may serve as a catalyst for investigation into narrative sense-making and social support on other family topics and in varying

family contexts. For example, in order to expand knowledge on women and family relationships, support and sense-making in other contexts involving women may also be explored, including miscarriage, infertility, unexpected pregnancy, and breast or cervical cancer. Focusing on issues of female health may allow for a deeper understanding of the uniqueness of mother-daughter social support, sense-making, and well-being regarding these important topics.

Investigating alternative perspectives and contexts may also be fruitful. Mothers' perceptions of their own and their daughters' support behaviors, sense-making, and well-being should be explored in order to gain a dyadic approach to the relational processes occurring in narrative sense-making. Likewise, other familial contexts should be studied including father-child relationships and relationships with extended family members (Floyd & Mormon, 2006). Investigating communication and sense-making from varying perspectives and within varying contexts will allow researchers to further understand the complexity of communication and sense-making in families.

Second, future investigations of sense-making change should also incorporate an analysis of the spoken stories during the relational interaction (Time 2). Since mother support communication at Time 2 predicted change in narrative sense-making between Times 1 and 3 (H_{3b}), it is important to understand the nature of sense-making spoken in the interpersonal interaction as well. This investigation may be achieved through a content analysis of transcribed spoken stories at Time 2 and then statistical analyses with mother social support, daughter well-being, and daughter sense-making including the Time 2 sense-making characteristics.

Third, analyses on the mother-daughter conversation behaviors at Time 2 may be fruitful in order to understand the support behaviors linked to sense-making change. Building upon the daughter-reported social support findings in the present study, observational analyses or interaction analyses would provide additional perspectives and information on the nonverbal behaviors, in particular, contributing to daughters' sense-making (e.g., Trees, 2000). Although the dyads of the current study discussed the daughter's difficult experience in particular, other studies might investigate sense-making change in shared difficulties as well (Koenig Kellas & Trees, 2006). An analysis of joint sense-making behaviors may provide researchers with knowledge on the way that couples' sense-making and well-being change together as they process a problem together over time.

Fourth, personality characteristics and traits should be studied with their effect on narrative sense-making, interpersonal interaction, and change. In his work on life stories and personality traits, McAdams (1993, 2001) asserted that narrative and personality are intimately connected. The stories individuals tell directly affect and reflect their overall personality and their perspective of the specific event as well. For example, research has shown that narrative tone is related to identity formation (McLean & Pratt, 2006) and personality traits such as neuroticism (McAdams et al., 2004). Further, researchers in the communibiology paradigm hypothesize that one's communication and personality traits directly reflect their genetic traits (Beatty & McCroskey, 2001). In support of studying narrative sense-making in the communibiology paradigm, Beatty and McCroskey claim, "In a very real sense, studying stories can be enriched by making contact with neurobiological facts related to how humans process information" (p. 118). Narrative

researchers such as Koenig Kellas, Willer, and Kranstuber (2010) called for future investigation of the way individuals' communication skills predict the psychological and physical benefits of narrative sense-making. Taken together, an investigation of communibiological traits and communication skills may allow for a deeper understanding of the individual differences in narrative sense-making and appraisal abilities and outcomes.

Applied applications of the current study's findings. In addition to furthering theoretical insight on interpersonal communication and sense-making, implications for applications in both narrative sense-making and social support intervention exist as well. The current dissertation serves as just a first step in moving toward applied applications of empirical knowledge of social support and narrative theorizing. Potential narrative sense-making outlets include narrative interventions in health contexts, counseling, and coping with trauma. First, information from the current study may inform health programs in schools, hospitals and churches in ways that help to enrich interpersonal interactions in those programs. For example, therapists and practitioners working with eating disorder patients may benefit from including narrative sense-making treatments with families. Research shows that parent-child communication is linked to disordered eating, and that professionals working with this population must consider family communication and identity as important factors within treatment programs (see Miller-Day & Fisher, 2008 for review). Thus, since the current study found that high-quality mother support during a conversation about difficulty (e.g., disordered eating) predicts increases in narrative sense-making (i.e., coherence and positive tone) regarding that experience, these programs may benefit from implementing expressive writing and/or

expressive talking about one's stressors. Knowledge on narrative sense-making and support may be fruitful for a variety of health-focused programming by providing a foundation for implementing expressive writing and talking exercises.

Second, counselors and therapists may benefit from teaching mothers how to help their daughters cope with their stressors through conversation. The current study's findings show that mothers can help their daughters re-story (White & Epston, 2001) or make sense of their difficult experiences over time. Thus, counselors may be able to teach mothers how to employ effective support skills in order to facilitate daughters' coping and sense-making in times of struggle. These techniques work in conjunction with the principles of narrative therapy, which promote re-storying of one's experience and externalizing the problem in order to rebuild one's life story (White & Epston, 2001). The current study builds upon narrative therapy literature by introducing the idea that interpersonal communication with a family member (i.e., one's mother) may allow for reappraisal or re-storying one's experience over time, and this knowledge may be useful for therapists and counselors working with families.

Third, the current study's findings can advance a line of research that incorporates the principles of expressive writing in applied interventions and contexts. For example, Holmes et al. (2007) conducted an intervention for women coping with intimate partner violence (IPV) using expressive writing techniques. The researchers found that, through expressive writing over four sessions, women engaged with and confronted both the positive and negative emotions surrounding their experience. Based on the current study's findings, these types of interventions may be coupled with interpersonal interaction and storytelling to further facilitate coping and well-being regarding the

trauma. Regarding the previous example from Holmes et al.'s (2007) work, victims of IPV may tell the story to a counselor or fellow IPV survivor during the expressive writing treatment. Similar interventions may exist for individuals undergoing terminal health problems, mental health issues, or managing grief.

Finally, social support theorists have recently called for the development and testing of communication in social support interventions (Goldsmith & Brashers, 2008), and the findings from the current study may be able to contribute to that cause. Goldsmith and Brashers noted that enacted or communicated social support is a necessary and important component of any support intervention, including face-to-face and online self-help groups, volunteers with the elderly and those in need, and mentors of varying kinds. These researchers call for more communication research to elucidate the type and qualities of support that are most helpful in interventions, and to inform emerging interventions as well. The current study modestly begins to answer this call by demonstrating that communication behaviors such as face threats, empathy, and emotional support all predict sense-making change in positive ways (H_{3b}). Practitioners may teach their participants support skills focused on those specific behaviors which may help to facilitate reappraisal of difficult experiences, rather than on social support vaguely. Social support interventionists may also benefit from the current study's findings by infusing the principles and methodology of expressive writing and narrative sense-making into their programs as well. Perhaps expressive talking techniques can be used in social support interventions as a way to facilitate dialogue between a support provider and distressed individual.

Conclusion

In conclusion, the present study's findings indicate that daughters' narrative sense-making and perceptions of her mothers' social support behaviors predict well-being, and that daughter sense-making about a difficult experience changes over time, in part as facilitated by mother-daughter communication about the difficulty. Findings from the current study bridge together literatures on narrative theorizing, social support, appraisal theory, expressive writing, and mother-daughter communication in a way that supports and advances theoretical and applied implications for each. As a whole, these findings provide researchers, practitioners, and family members insight into the ways that individuals cope with difficult experiences through constructing, writing, and telling their stories of trauma over time and within interpersonal relationships.

REFERENCES

- Baerger, D. R., & D. P. McAdams, D. R. (1999). Life story coherence and its relation to psychological well-being, *Narrative Inquiry*, 9, 69-96.
- Barrera, M. J., & Garrison-Jones, C. (1992). Family and peer social support as specific correlates of adolescent depressive symptoms. *Journal of Abnormal Child Psychology*, 20, 1-16.
- Bavelas, J. B., Coates, L., & Johnson, T. (2002). Listener responses as a collaborative process: The role of gaze. *Journal of Communication*, 52, 566-580.
- Beatty, M. J., & McCroskey, J. C. (2001). *The biology of communication: A communibiological perspective*. Cresskill, NJ: Hampton Press.
- Berry, D.S. & Pennebaker, J.W. (1993). Nonverbal and verbal emotional expression and health. *Psychotherapy and Psychosomatics*, 59, 11-19.
- Bochner, A. P. (2002). Perspectives on inquiry III: The moral of stories. In M. L. Knapp, & J. A. Daly (Eds.) *Handbook of interpersonal communication*, (3rd ed.) (pp. 73-101). Thousand Oaks, CA: Sage.
- Bochner, A. P., Ellis, C., & Tillman-Healy, L. M. (1997). Relationships as stories. In S. Duck (Ed.), *Handbook of personal relationships: Theory, research and interventions*, (2nd ed.) (pp. 307-324). New York: John Wiley & Sons.
- Brown, P., & Levinson, S. C. (1987). *Politeness: Some universals in language usage*. Cambridge: Cambridge University Press.
- Bruner, J. (1990). *Acts of meaning*. Cambridge: Harvard University Press.

- Buehlman, K. T., Gottman, J. M., & Katz, L. F. (1992). How a couple views their past predicts their future: Predicting divorce from an oral history interview. *Journal of Family Psychology*, 5, 295-318.
- Burleson, B. R. (1984). Comforting communication. In H. E. Sypher and J. L. Applegate (Eds.) *Communication by children and adults: Social cognitive and strategic processes*. (pp. 63-104). Beverly Hills: CA. Sage.
- Burleson, B. R. (1990). Comforting as social support: Relational consequences of supportive behaviors. In S. Duck with R. C. Silver (Eds.) *Personal relationships and social support*. Newbury Park, CA: Sage Publications.
- Burleson, B. R. (1994). Comforting messages. Significance, approaches, and effects. In B. R. Burleson, T. L. Albrecht, & I. G. Sarason (Eds.) *Communication of social support: Messages, interactions, relationships and community*. Thousand Oaks, CA: Sage.
- Burleson, B. R. (2003). Emotional support skills. In J. O. Greene & B. R. Burleson (Eds.), *Handbook of communication and social interaction skills* (pp. 551–594). Mahwah, NJ: Erlbaum.
- Burleson, B. R., & Goldsmith, D. J. (1998). How the comforting process works: Alleviating emotional distress through conversationally induced reappraisals. In P. A. Anderson & L. K. Guerrero (Eds.) *Handbook of Communication and Emotion: Research, Theory, Application and Contexts*. San Diego, CA: Academic Press.

- Burleson, B. R., & Kunkel, A. W. (1996). The socialization of emotional support skills in childhood. In G. R. Pierce, B. S. Sarason, & I. G. Sarason (Eds.), *Handbook of social support and the family* (pp. 105-140). New York: Plenum.
- Burleson, B. R., & Kunkel, A. W. (2002). Parental and peer contributions to emotional support skills of the child: From whom do children learn to express support? *The Journal of Family Communication*, 2, 79-97.
- Burleson, B. R., & MacGeorge, E. L. (2002). Supportive communication. In M. L. Knapp & J. A. Daly (Eds.), *Handbook of interpersonal communication*, (3rd ed.) (pp. 374-424). Thousand Oaks, CA: Sage.
- Burleson, B. R., & Samter, W. (1985). Consistencies in theoretical and naive evaluations of comforting messages. *Communication Monographs*, 52, 103–123.
- Carrere, S., Buehlman, K. T., Gottman, J. M., Coan, J., & Ruckstuhl, L. (2000). Predicting marital stability and divorce in newlywed couples. *Journal of Family Psychology*, 14, 42-58.
- Chung, C. K., & Pennebaker, J. W. (2012). Linguistic inquiry and word count (LIWC): Pronounced “Luke,” ... and other useful facts. In P. McCarthy & C. Boonthum (Eds.), *Applied natural language processing and content analysis: Identification, investigation, and resolution*. Hershey, PA: IGI Global.
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Relationships*, 3, 171-184.
- Conway, K., & Russell, G. (2000). Couple’s grief and experience of support in the aftermath of miscarriage. *British Journal of Psychology*, 73, 531-545.

- Cupach, W. R., & Carson, C. L. (2002). Characteristics and consequences of interpersonal complaints associated with perceived face threat. *Journal of Social and Personal Relationships*, 19, 443 -462.
- Cupach, W. R., & Metts, S. (1994). *Facework*. Thousand Oaks, CA: Sage.
- Cutrona, C. E. (1996). *Social support in couples*. Thousand Oaks, CA: Sage.
- Cutrona, C. E., & Suhr, J. A. (1994). Social support communication in the context of marriage: An analysis of couples' supportive interactions. In B. R. Burleson & T. L. Albrecht (Eds.), *Communication of social support: Messages, interactions, relationships, and community* (pp. 113–135). Newbury Park, CA: Sage.
- Davis, M. H., (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*. 44, 113-126.
- Derlega, V. J., Barbee, A. P., & Winstead, B. A. (1994). Friendship, gender, and social support: Laboratory studies of supportive interactions. In B. R. Burleson, T. L. Albrecht, & I. G. Sarason (Eds.), *The communication of social support: Messages, interactions, relationships, and community* (pp. 136-151). Thousand Oaks, CA: Sage.
- Dornbusch, S. M., Mont-Reynaud, R., Ritter, P. L., Chen, Z., & Steinberg, L. (1991). Stressful events and their correlates among adolescents of diverse backgrounds. In M. E. Colten, & S. Gore (Eds.), *Adolescent stress: Causes and consequences* (pp. 111-130). New York: Aldine De Gruyter.

- Edwards, B., & Clark, V. (2004). The psychological impact of a cancer diagnosis on families: The influence of family functioning and patients' illness characteristics on depression and anxiety. *Psycho-Oncology*, 13, 562-576.
- Fiese, B. H., & Sameroff, A. J. (1999). The family narrative consortium: A multidimensional approach to narratives. *Monographs of the Society for Research in Child Development*, 62, 1-36.
- Fingerman, K. L. (1996). Sources of tension in the aging mother and adult daughter relationship. *Psychology and Aging*, 11, 591-606.
- Fingerman, K. L. (2001). *Aging mothers and their adult daughters: A study in mixed emotions*. New York: Springer.
- Fischer, L. R. (1981). Transitions in the mother-daughter relationship. *Journal of Marriage and Family*, 43, 613-622.
- Fischer, L. R. (1986). *Linked lives*. New York: Harper and Row.
- Fisher, C. (2010). Coping with breast cancer across adulthood: Emotional support communication in the mother-daughter bond. *Journal of Applied Communication Research*. 38, 386 - 411.
- Fisher, W. R. (1987). *Human communication as narration: Toward a philosophy of reason, value, and action*. Columbia, SC: University of South Carolina Press.
- Floyd, K., & Mormon, M. T. (2006). *Widening the family circle: New research in family communication*. Thousand Oaks, CA: Sage Publications.
- Folkman, S., Lazarus, R. S., Gruen, R. J., & DeLongis, A. (1986). Appraisal, coping, health status and psychological symptoms. *Journal of Personality and Social Psychology*, 50, 571-579.

- Francis, M. E., & Pennebaker, J. W. (1992). Putting stress into words: The impact of writing on physiological, absentee, and self-reported emotional well-being measures. *Stress Management*, 6, 280-287.
- Franco, N., & Levitt, M. J. (1998). The social ecology of middle childhood: Family support, friendship quality, and self-esteem. *Family Relations: Interdisciplinary Journal of Applied Family Studies*, 47, 315-321.
- Frattaroli, J. (2006). Experimental disclosure and its moderators: A meta-analysis. *Psychological Bulletin*, 132, 823-865.
- Galvin, K. M., Bylund, C. L., & Brommel, B. J. (2007). *Family communication: Cohesion and change*. (7 ed.) Allyn & Bacon: Boston, MA.
- Garbin, C. (2012a). *Coding multiple category variables for inclusion in multiple regression*. [PDF document]. Retrieved from UNL Psychology Department: Research Design and Data Analysis website: <http://psych.unl.edu/psycrs/>.
- Garbin, C. (2012b) *Multiple regression: Some details*. [PDF document]. Retrieved from UNL Psychology Department: Research Design and Data Analysis website: <http://psych.unl.edu/psycrs/>.
- Garbin, C. (2012c). *Cochran's Q test: Analysis of k-within-groups data within a qualitative (binary) DV*. [PDF document]. Retrieved from UNL Psychology Department: Research Design and Data Analysis website: <http://psych.unl.edu/psycrs/>.
- Gardner, K. A., & Cutrona, C. E. (2004). Social support communication in families. In A. Vangelisti (Eds) *Handbook of family communication*, (pp. 495-512). Lawrence Erlbaum Associates: Mahwah, NJ.

- Gergen, K. J., & Gergen, M. M. (1987). Narratives of relationships. In R. Burnett, P. McGhee, & D. Clarke (Eds.), *Accounting for relationships* (pp. 269-288). London: Methuen.
- Goldsmith, D. J. (1994). The role of facework in supportive communication: In B. R. Burleson, T. L. Albrecht, & I. G. Sarason (Eds.) *Communication of social support: Messages, interactions, relationships, and community* (pp. 29-49). Thousand Oaks, CA: Sage.
- Goldsmith, D. J. (2004). *Communicating social support*. New York: Cambridge University Press.
- Goldsmith, D. J., & Brashers, D. E. (2008). Communication matters: Developing and testing social support interventions. *Communication Monographs*, 75, 7, 320-330.
- Gottlieb, L.N. & Mendelson, M.J. (1990). Parental support and firstborn girls' adaptation to the birth of a sibling. *Journal of Applied Developmental Psychology*, 11, 29-48.
- Graybeal, A., Seagal, J. D., & Pennebaker, J. W. (2002). The role of story-making in disclosure writing: The psychometrics of narrative. *Psychology and Health*, 17, 571-581.
- Grossbaum, M. F., & Bates, G. W. (2002). Correlates of psychological well-being at midlife: The role of generativity, agency and communion, and narrative themes. *International Journal of Behavioral Development*, 26, 120-127.
- Holmes, D., Alperson, G. W., Ismailji, T., Classen, C., Wales, T., Cheasty, V., Miller, A. & Koopman, C. (2007). Cognitive and emotional processing in narratives of women abused by intimate partners. *Violence Against Women*, 13, 1192-1205.

- Hunter, F. T., & Youniss, J. (1982). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511-524.
- Jones, S. M., & Wirtz, J. G. (2006). How *does* the comforting process work? An empirical test of an appraisal-based model of comforting. *Human Communication Research*, 32, 217-243.
- Kahn, J. H., Tobin, R. M., Massey, A. E., & Anderson, J. A. (2007). Measuring emotional expression within the Linguistic Inquiry and Word Count. *American Journal of Psychology*, 120, 263-286.
- Kaufman, G., & Uhlenberg, P. (1998). Effects of life course transitions on the quality of relationships and their parents. *Journal of Marriage and Family*, 60, 924-938.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York: Guilford.
- Koenig Kellas, J. (2005). Family ties: Communicating identity through jointly told family stories. *Communication Monographs*, 72, 365-389.
- Koenig Kellas, J. (2008). Narrative theories: Making sense of interpersonal communication. In L. A. Baxter, & D. O. Braithwaite (Eds.), *Engaging theories in interpersonal communication* (pp. 241-255). Thousand Oaks, CA: Sage.
- Koenig Kellas, J. (2010). Narrating family: Introduction to the special issue on narratives and storytelling in the family. *Journal of Family Communication*, 10, 1-6.
- Koenig Kellas, J., Baxter, L., Braithwaite, D. O., LeClair-Underberg, C., Routsong, T., Thatcher, M., & Normand, E. L. (2009). *Narratively (re)framing stepfamily beginnings: The relationship between adult stepchildren's stepfamily origin*

stories and their perceptions of the family. Presented at the annual meeting of the Central States Communication Association in St. Louis, MO.

Koenig Kellas, J., Kranstuber, H., Willer, E. S., & Carr, K. (2012). *Storytelling and storylistening in friendship pairs.* Presented at the annual meeting of the National Communication Association, Orlando, FL.

Koenig Kellas, J., & Manusov, V. (2003). What's in a story? The relationship between narrative completeness and adjustment to relationship dissolution. *Journal of Social and Personal Relationships, 20*, 285-307.

Koenig Kellas J. & Trees, A. R. (2005). Rating interactional sense-making in the process of joint storytelling. In V. Manusov (Ed.) *The sourcebook of nonverbal measures: Going beyond words* (pp. 281-294). Mahwah, NJ: Lawrence Erlbaum.

Koenig Kellas, J. & Trees, A. R. (2006). Finding meaning in difficult family experiences: Sense-making and interaction processes during joint family storytelling. *Journal of Family Communication, 6*, 49-76.

Koenig Kellas, J., Willer, E., & Kranstuber, H. (2010). Fairytales and tragedies: Narratively making sense of the dark side (and the dark side of making sense) of personal relationships. In W. Cupach and B. Spitzberg (Eds.) *The dark side of close relationships II.* (pp. 63-94). New York, NY: Routledge.

Kranstuber, H. & Koenig Kellas, J. (2011). Instead of growing under her heart I grew in it: The relationship between adoption entrance narratives and adoptees' self-concept. *Communication Quarterly, 59*, 179-199.

Labov, W. (1999). The transformation of experience in narrative. In A. Jaworski, & N. Coupland (Eds.) *The discourse reader.* (pp. 221-235). New York: Routledge.

- Labov, W., & Waletzky, J. (1967). Narrative analysis: Oral versions of personal experience. In J. Helm (Ed.), *Essays on the verbal and visual arts: Proceedings of the 1966 annual spring meeting of the American Ethnological Society*. Seattle: University of Washington Press.
- Langellier, K. M., & Peterson, E. E. (1992). Spinstorying: An analysis of women storytelling. In E. C. Fine & J. H. Speer (Eds). *Performance, culture and identity*. Westport, CT: Praeger Publishers.
- Langellier, K. M., & Peterson, E. E. (1993). Family storytelling as a strategy of social control. In D. K. Mumby (Eds.) *Narrative and social control: Critical perspectives*. Newberry Park, CA: Sage.
- Lazarus, R. S. (1991). *Emotion and adaptation*. New York: Oxford University Press.
- Lazarus, R. S. (1999). *Stress and emotion: A new synthesis*. New York, NY: Springer Publishing Corporation.
- Lazarus, R. S., & Cohen, J. B. (1977). Environmental stress. In I. Altman & J. Wohlwill (Eds.) *Human behavior and environment*. (pp. 89-127). New York, NY: Plenum Press.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer Publishing Corporation.
- LeClair-Underberg, C. (2008). *Communicatively coping with miscarriage: The impact of emotional support and narrative coherence on women's individual and relational well-being*. Unpublished doctoral dissertation, University of Nebraska-Lincoln, Lincoln, NE.

- Lyubomirsky, S., Sousa, L., & Dickerhoof, R. (2006). The costs and benefits of writing, talking and thinking about life's triumphs and defeats. *Journal of Personality and Social Psychology*, 90, 692-708.
- Maines, D. R. (1993). Narrative's moment and sociology's phenomena: Toward a narrative sociology. *Sociological Quarterly*, 34, 17-37.
- Mandelbaum, J. (1987). Couples sharing stories. *Communication Quarterly*, 35, 144-170.
- Manne, S. L., Dougherty, J., Veach, S., & Kless, R. (1999). Hiding worries from one's spouse: Protective buffering among cancer patients and their spouses. *Cancer Research, Therapy and Control*, 8, 175-188.
- McAdams, D. P. (1993). *The stories we live by: Personal myths and the making of the self*. New York: The Guilford Press.
- McAdams, D. P. (2001). The psychology of life stories. *Review of General Psychology*, 5, 100-122.
- McAdams, D. P., Anyidoho, N. A., Brown, C., Huang, Y. T., Kaplan, B., & Machado, M. A. (2004). Traits and stories: Links between dispositional and narrative features of personality. *Journal of Personality*, 72, 761-784.
- McAdams, D. P., Diamond, A., de St. Aubin, E., Mansfield, E. (1997). Stories of commitment: The psychosocial construction of generative lives. *Journal of Personality and Social Psychology*, 72, 678-694.
- McAdams, D. P., Reynolds, J., Lewis, M., & Bowman, P. J. (2001). When bad thing turn good and good things turn bad: Sequences of redemption and contamination in life narrative and their relation to psychological adaption in midlife adults and in students. *Personality and Social Psychology Bulletin*, 27, 474-485.

- McLean, K. C., & Breen, A. V. (2009). Process and content of narrative identity development in adolescence: Gender and well-being. *Developmental Psychology*, 45, 702-710.
- McLean, K. C., & Pratt, M. W. (2006). Life's small (and big) lessons: Identity statuses and meaning-making in the turning point narratives of emerging adults. *Developmental Psychology*, 42, 714-722.
- Miller-Day, M. (2004). *Communication among grandmothers, mothers, and adult daughters: A qualitative study of maternal relationships*. Mahwah, NJ: Erlbaum.
- Miller-Day, M. A., & Fisher, C. L. (2008). Parent-emerging adult child communication and disordered eating patterns. In J. N. Fuchs (Ed.) *Eating Disorders in Adult Women* (pp. 1-19). New York: Nova Science Publishers.
- Murray, E. J., & Segal, D. L. (1994). Emotional processing in vocal and written expression of feelings about traumatic experiences. *Journal of Traumatic Stress*, 7, 391-405.
- Noller, P., & Bagi, S. (1985). Parent-adolescent communication. *Journal of Adolescence*, 8, 125-144.
- Oakley, A., McPherson, A., & Roberts, H. (1990). *Miscarriage*. London: Penguin.
- Pauley, P. M., Morman, M. T., & Floyd, K. (2011). Expressive writing improves subjective health among testicular cancer survivors: A pilot study. *International Journal of Men's Health*, 10, 199-219.
- Pennebaker, J. W. (1993). Putting stress into words: Health, linguistic and therapeutic implications. *Behavior Research Therapy*, 31, 539-548.

- Pennebaker, J. W., & Beall, S. K. (1986). Confronting a traumatic event: Toward an understanding of inhibition and disease. *Journal of Abnormal Psychology, 95*, 274-281.
- Pennebaker, J. W., Colder, M., & Sharp, L. K. (1990). Accelerating the coping process. *Journal of Personality and Social Psychology, 58*, 528-537.
- Pennebaker, J.W. & Francis, M.E. (1996). Cognitive, emotional, and language processes in disclosure. *Cognition and Emotion, 10*, 601-626.
- Pennebaker, J.W., & Francis, M.E. (1999). *Linguistic Inquiry and Word Count: LIWC*. Erlbaum Publishers.
- Pennebaker, J.W., Francis, M.E., & Booth, R.J. (2001). *Linguistic Inquiry and Word Count: LIWC 2001*. Mahwah, NJ: Erlbaum Publishers (www.erlbaum.com).
- Pennebaker, J.W. & Hoover, C.W. (1986). Inhibition and cognition: Towards an understanding of trauma and disease. In R.J. Davidson, G.E. Schwartz & D. Shapiro (Eds.), *Consciousness and self-regulation*, (Vol. 4) (pp. 107-136). New York: Plenum.
- Pennebaker, J. W., Kiecolt-Glaser, J. K., & Glaser, R. (1988). Disclosure of traumas and immune function: Health implications for psychotherapy. *Journal of Consulting and Clinical Psychology, 56*, 239-245.
- Pennebaker, J. W., Mayne, T. J., & Francis, M. E. (1997). Linguistic predictors of adaptive bereavement. *Journal of Personality and Social Psychology, 72*, 863-871.
- Pennebaker, J. W., & Stone, L. D. (2003). Words of wisdom: Language use over the life span. *Journal of Personality and Social Psychology, 85*, 291-301.

- Petrie, K. J., Fontanilla, I., Thomas, M. G., Booth, R. J., & Pennebaker, J. W. (2004). Effect of written emotional expression on immune function in patients with human immunodeficiency virus infection: A randomized trial. *Psychosomatic Medicine*, 66, 272–275.
- Polanyi, L. (1985). *Telling the American story: A structural and cultural analysis of conversational storytelling*. Norwood, NJ: Ablex
- Pratt, M. W., & Fiese, B. H. (2004). Family, stories and the life course: An ecological context. In M. W. Pratt & B. H. Fiese (Eds.) *Family stories and the life course: Across time and generations*. Mahwah, NJ: Lawrence Erlbaum.
- Richards, J. M., Beall, W. E., Seagal, J. D., & Pennebaker, J. W. (2000). Effects of disclosure of traumatic events on illness behavior among psychiatric prison inmates. *Journal of Abnormal Psychology*, 209, 156-160.
- Rittenour, C. E., & Martin, M. M. (2008). Convergent validity of the communication based emotional support scale. *Communication Studies*, 59, 235-241.
- Rogers, C. R. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Counseling Psychology*, 21, 95-103.
- Rose, A. J., Carlson, W., & Waller, E. M. (2007). Prospective associations of co-rumination with friendship and emotional adjustment: Considering the socioemotional trade-offs of co-rumination. *Developmental Psychology*, 43, 1019-1031.
- Rushton, J. P. (1980). *Altruism, socialization and society*. Englewood Cliffs, NJ: Prentice-Hall.

- Sarason, I. G., Sarason, B. R., & Pierce, G. R. (1994). Relationship-specific social support: Toward a model for the analysis of supportive interactions. In B. R. Burleson, T. L. Albrecht, & I. G. Sarason (Eds.) *Communication of social support: Messages, interactions, relationships, and community*. Thousand Oaks, CA: Sage.
- Schrodt, P., & Ledbetter, A. (2007). Communication processes that mediate family communication patterns and mental well-being: A mean and covariance structures analysis of young adults from divorced and nondivorced families. *Human Communication Research*, 33, 330-356.
- Smyth, J. M., True, N., & Souto, J. (2001). Effects of writing about traumatic experiences: The necessity of narrative structuring. *Journal of Social and Clinical Psychology*, 20, 161-172.
- Sprecher, S., & Hendrick, S. (2004). Self-disclosure in intimate relationships: Associations with individual and relationship characteristics over time. *Journal of Social and Clinical Psychology* 23, 836-856.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Allyn and Bacon.
- Tannen, D. (2006). *You're wearing that? Understanding mothers and daughters in conversation*. New York: Random House.
- Tausczik, Y. R., & Pennebaker, J. W. (2010). The psychological meaning of words: LIWC and computerized text analysis methods. *Journal of Language and Social Psychology*, 29, 24-54.

- Trees, A. R. (2000). Nonverbal communication and the support process: Functional sensitivity in interactions between mothers and young adult children. *Communication Monographs*, 67, 239-261.
- Trees, A. R. (2002). The influence of relational context on support processes: Points of difference and similarity between young adult sons and daughters in problem talk with mothers. *Journal of Social and Personal Relationships*, 19, 703-722.
- Trees, A. R., & Koenig Kellas, J. (2009). Telling tales: Enacting family relationships in joint storytelling about difficult family experiences. *Western Journal of Communication*, 73, 91-111.
- Vangelisti, A. L., Crumley, L. P., & Baker, J. L. (1999). Family portraits: Stories as standards for family relationships. *Journal of Social and Personal Relationships*, 16, 335-368.
- Veroff, J., Sutherland, L., Chadiha, L., & Ortega, R. (1993). Predicting marital quality from narrative assessments. *Journal of Marriage and the Family*, 55, 317-329.
- Wamboldt, F. (1999). Co-constructing marriage: Analyses of young couples' relationship narratives. *Monographs of the Society for Research in Child Development*, 64, 37-51.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS Scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.
- Weber, K., Johnson, A., & Corrigan, M. (2004). Communicating emotional support and its relationship to feelings of being understood, trust, and self-disclosure. *Communication Research Reports*, 21, 316-323.

- Weber, K., & Patterson, B. (1996). Construction and validation of a communication based emotional support scale. *Communication Research Reports, 13*, 68-76.
- Wheeless, L. R. (1978). A follow-up study of the relationships among trust, disclosure, and interpersonal solidarity. *Human Communication Research, 4*, 143-157.
- White, M., & Epston, D. (1990). *Narrative means to therapeutic ends*. Adelaide, South Australia: Dulwich Centre.
- Wigren, J. (1994). Narrative completion in the treatment of trauma. *Psychotherapy, 31*, 415-423.
- Willer, E. K., & Cupach, W. R. (2008). When sugar and spice turn to fire and ice: Factors affecting the adverse consequences of relational aggression among girls. *Communication Studies, 59*, 415-429.
- Young, M. H., Miller, B. C., Norton, M. C., & Hill, E. J. (1995). The effect of parental supportive behaviors on life satisfaction of adolescent offspring. *Journal of Marriage and the Family, 57*, 813-822.

APPENDICES

Appendix A: Participant Recruitment Script

Mother-Daughter Conversations about Difficulty

Hello, my name is Haley Kranstuber and I am conducting research about how mothers and daughters communicate with one another about their life experiences. Daughters will be asked to write out and discuss a story of a difficult experience with their mothers. This research will provide insight into the ways mothers and daughters communicate with one another about difficult events and the outcomes associated with these conversations.

In order to participate in this study, you must be:

- a) A mother-daughter pair, and
- b) At least 18 years old.

Specifically, the study will take place over the course of four weeks:

- First, the daughter and/or mother will contact the researcher to set up a session in which you will come to the Communication Studies research lab (Burnett 331) and engage in a video-taped interaction.
- Second, once you schedule your session, I will email both participants a link to an Informed Consent form to read and complete. Daughters will also receive an online survey, which will involve providing demographic information about yourself and current well-being. The survey will also involve writing out a story of a difficult experience that is currently bothersome to you. You will be asked to complete this survey within 24 hours of receiving it.
- Third, the mother-daughter pair will come to the research lab. During this session, the daughter will be asked to talk about the difficult event that she wrote about in the survey emailed two days prior. The mother will interact with her daughter as she normally would. At the end of each session, you will be separated to fill out survey measures, such as measures about how you're feeling that day.
- Fourth, I will e-mail the daughter twice more with a link to an online survey – two days after the mother-daughter interaction and three weeks after that – to be taken within 24 hours of the email. You will complete this survey separately (i.e., without your mom/daughter) and will be given the opportunity to provide your name and instructor information in order to receive extra credit.

Participating in this study may provide daughters with insights into the ways they cope with difficult events in their lives. Mothers may gain knowledge about their daughters' experiences, and may benefit from the act of providing support to their daughter. Also, your involvement in this study will allow you to be a part of socially significant research that may be beneficial to communication scholars, as well as practitioners who seek to help people cope with and make sense of difficulty.

In this study, there is a risk of slight emotional distress and discomfort to participants. There is a chance that you may feel uncomfortable talking or listening about life events with your mother/daughter. For daughters discussing their difficult life events, risks include feeling

uncomfortable or embarrassed discussing difficult events of a personal nature with your mother and/or experiencing distress thinking about the difficult experience. For mothers, depending on the nature of the story, you may feel uncomfortable listening to the difficult story, which could put your relationship at risk. Other risks include feeling uncomfortable or embarrassed listening to your daughter's story and/or feeling distressed by the difficult experience. The researcher has taken steps to eliminate these risks for both participants. Namely, the daughter will choose the story she will tell, and so she may decide on a story that she will feel comfortable telling to her mother. The mother or the daughter may choose to stop participation at any time.

Results of this research may be reported in my dissertation, presented at professional conventions and included in journal articles. However, your survey responses will be kept confidential and your name will not be associated in any way with the research findings.

If you are currently enrolled in a Communication Studies course, you will receive research credit or extra credit points for your full participation in this study. You must complete all parts of the study to earn the extra credit. Extra credit research credit compensation is at the discretion of your instructor or professor. At the discretion of your instructor, Communication Studies students may receive up to three research participation credits (i.e., the equivalent of completing three studies or three non-research opportunities). Should you choose not to participate in this study, you will be afforded other opportunities to earn points by your instructor or professor, such as participation in other research studies or completion of other reading or writing assignments. All research opportunities are posted on the Communication Studies Department website which is regularly updated throughout the semester. Further, the non-research opportunities provided to you will take approximately the same amount of time and effort as participating in research studies. Those participants who do not qualify for extra credit (daughters and/or mothers) will be entered into a raffle to win a \$25 gift certificate to several restaurants/coffee shops in Lincoln. One person per every 25 participants will win a gift card. Do you have any questions?

If you are interested in participating, please coordinate with your mother/daughter (i.e., your study partner) and contact me, **Haley Kranstuber**, at haley.kranstuber@huskers.unl.edu to set up your study session.

Thank you for your time!

Haley Kranstuber

Haley Kranstuber
PhD Candidate
University of Nebraska-Lincoln
Department of Communication Studies
415 Oldfather Hall
Lincoln, NE 68588-0329
402.472.3348
haley.kranstuber@huskers.unl.edu

Dr. Jody Koenig Kellas
Associate Professor
University of Nebraska-Lincoln
Department of Communication Studies
428 Oldfather Hall
Lincoln, NE 68588-0329
402.472.2079
jkellas2@unl.edu

Appendix B: Participant Contact Emails

Mother-Daughter Conversations about Difficulty

Email 1: After Potential Participants Email Researcher

Hi _____,

Thank you for interest in this study! I am currently scheduling participation times for the week of _____. Below are the available times. The lab session should take approximately 30 minutes. Please let me know all of the times you and your partner (mother/daughter) are available for participation.

Monday: 7 am-10 pm

Tuesday: 7-9 am; 11 am-5 pm; 8:15-10 pm

Wednesday: 7 am-10 pm

Thursday: 7-9 am; 11 am-10 pm

Friday: 7 am-10 pm

When you email back, please let me know:

- a) You and your partner's available times for participation (selecting from times listed above)
- b) You and your partner's full names
- c) Your partner's email address

The participation sessions will be in the Social Interaction Lab in Burnett Hall 331 on UNL's City campus. I look forward to hearing from you soon.

Thank you!

Haley

Email 2a (Daughter): After Scheduling the Participants & Pre-Interaction Survey

Hi _____,

Thank you again for your interest in this study. Here is the day and time of your scheduled appointment:

____ *List the day of week, date, and time.* ____

The participation sessions will be in the Social Interaction Lab in Burnett Hall 331. Please let me know immediately if you need to reschedule your appointment.

Here is the link to your pre-participation survey:

<ADD PRE-PARTICIPTION SURVEY LINK HERE>

Please complete this survey **within 24 hours**. For this survey and the rest of your participation in the study, you are assigned the following participation number:

_____(Name 1):" _____"_(P#)

I will email you with your Time 1 survey two days before your mother-daughter interaction in the Social Interaction Lab. Please let me know if you have any questions about anything at all. I look forward to working with you soon!

Thank you!
Haley

Email 2b (Mother): After Scheduling the Participants

Hi _____,

Thank you again for your interest in this study. Here is the day and time of your scheduled appointment:

_____*List the day of week, date, and time.*____

The participation sessions will be in the Social Interaction Lab in Burnett Hall 331 (on UNL's City Campus). Please let me know immediately if you need to reschedule your appointment.

A survey will be emailed to you two days before your participation. For that survey and the rest of your participation in the study, you are assigned the following participation number:

_____(Name 2):" _____"_(P#)

Please let me know if you have any questions about anything at all. I look forward to working with you soon!

Thank you!
Haley

Email 3a (Daughter): Reminder Email with Daughter Time 1 Survey and Mother Informed Consent

Subj: Mother-Daughter Communication study survey: Please complete within 24 hours!

Hi _____,

This email is regarding two important pieces of information for your participation in the Mother-Daughter Communication study.

1) First, I wanted to remind you of your scheduled times and days:

___ *List the day of week, date, and time.* ___

The participation sessions will be in Burnett Hall 331. Please let me know immediately if you need to reschedule your appointment.

Second, below is the link for your first survey. **Please complete this survey within 24 hours upon receiving this email.** This survey will be regarding one of the difficult experiences you listed in your last survey. Based on the study's intentions and requirements, please write out the following story when prompted:

Story # ___ about _____.

Remember that you will be writing out this story in the following survey, and will be discussing it with your mother in the Social Interaction Lab. If you feel uncomfortable with either of those requirements, please let me know and we can decide upon a different story.

You will need your participant number for the following survey and throughout the study. Remember that your participant number is:

_____ (Name 1): " _____ " (P#)

Please click here for the Time 1 survey:

<ADD SURVEY 1 LINK HERE>

If you have any questions, feel free to e-mail me at haley.kranstuber@huskers.unl.edu. I look forward to working with you soon!

Email 3b (Mother): Reminder Email with Daughter Pre-Interaction Survey and Mother Informed Consent

Subj: Mother-Daughter Communication study survey: Please complete within 24 hours!

Hi _____,

This email is regarding two important pieces of information for your participation in the Mother-Daughter Communication study.

1) First, I wanted to remind you of your scheduled times and days:

___ *List the day of week, date, and time.* ___

The participation sessions will be in Burnett Hall 331. Please let me know immediately if you need to reschedule your appointment.

Second, below is the link to your Informed Consent form. **Please read through and complete this form within 24 hours of receiving this email.**

You will need your participant number for the following survey and throughout the study. Remember that your participant number is:

_____ (Name 1):" _____ " (P#)

Please click here for the informed consent form:

<ADD MOTHER INFORMED CONSENT LINK HERE>

If you have any questions, feel free to e-mail me at haley.kranstuber@huskers.unl.edu. I look forward to working with you soon!

Thank you!
Haley

Email 4: Time 3 Survey for Daughter

Hi _____,

Thank you for your continued participation in the Mother-Daughter Communication study. Below is the link for your second survey. **Please complete this survey within 24 hours upon receiving this email.**

You will need your participant number for the following survey and throughout the study. Remember that your participant number is:

_____ (Name 1):" _____ " (P#)

Please click here for the final survey:

<ADD SURVEY 3 LINK HERE>

If you have any questions, feel free to e-mail me at haley.kranstuber@huskers.unl.edu. I will email you your final survey in three weeks from today, and it will need to be completed within 24 hours of receiving it as well.

Thank you!

Email 5: Time 4 Survey for Daughter

Hi _____,

Thank you for your continued participation in the Mother-Daughter Communication study. Below is the link for your final survey. In order to complete your participation in the study, you need to complete a final survey. On the survey, there is a space for you to indicate the name of your instructor so that you may receive extra credit for your Communication Studies course if you are participating for extra credit. If you are not participating for extra credit, there is space to enter your information to be entered into a drawing for a restaurant gift card.

PLEASE COMPLETE THIS SURVEY IN THE NEXT 24 HOURS IN ORDER TO COMPLETE THE STUDY AND RECEIVE YOUR RESEARCH CREDIT.

Remember that your participant number is:

_____ (Name 1):" _____ " (P#)

Please click here for the final survey:

[**<ADD SURVEY 4 LINK HERE>**](#)

If you have any questions, please feel free to e-mail me at haley.kranstuber@huskers.unl.edu. Thank you again for your participation in this study! I appreciate your time and willingness to contribute to this project. Please let me know if you have any questions about anything at all.

Thank you!
Haley

Appendix C: Participant Informed Consent



IRB# 20110912003EP
Date Approved: 09/08/2011
Valid Until: 09/07/2012

Department of Communication Studies

Mother-Daughter Conversations about Difficulty

Participant Informed Consent

Purpose: The purpose of this research study is to learn more about how mothers and daughters interact with one another about their difficult life experiences. Daughter participants will be asked to write out and talk with their mother about a difficult life experience that is still bothersome to them. This research will give us insight into the ways mothers and daughters communicate with one another about difficult events and the outcomes associated with these conversations.

In order to participate in this study, you must be:

- c) A mother-daughter pair, and
- d) At least 18 years old.

Benefits: Participating in this study may provide daughters with insights into the ways they cope with difficult events in their lives. Mothers may gain knowledge about their daughters' experiences, and may benefit from the act of providing support to their daughter. Also, your involvement in this study will allow you to be a part of socially significant research that may be beneficial to communication scholars, as well as practitioners who seek to help people cope with and make sense of difficulty.

Procedures: The study will take place over the course of four weeks. First, interested participants will contact the researcher to set up a session in which you will come to the Communication Studies research lab (Burnett 331) and engage in a video-taped interaction. Second, once you schedule your session, the researcher will email both participants a link to a survey containing an Informed Consent form to complete and questions about yourself and your current well-being. For the daughter, the survey will also involve writing out a story of a difficult experience that is currently bothersome to her. Participants will be asked to complete these surveys within 24 hours of receiving them.

Third, the mother-daughter pair will come to the research lab. During this session, the daughter will be asked to talk about the difficult event that she wrote about in the survey emailed two days prior. The mother will interact with her daughter as she normally would. At the end of each session, you will be separated and the mother and daughter will fill out survey measures, such as measures about how you're feeling that day. Fourth, the researcher will e-mail the daughter twice more with a link to an online survey – two days after the mother-daughter interaction and three weeks after that – to be taken within 24 hours of the email. You will complete this survey

separately (i.e., without your mother's help) and will be given the opportunity to provide your name and instructor information in order to receive extra credit. The four steps of the project will take the daughters approximately 30 minutes each, amounting to two hours total for the study. Mothers will only participate in the 30 minute lab interaction and survey completion.

Confidentiality: Results of this research may be presented in the researcher's dissertation, at professional conventions and included in journal articles. However, your survey responses will be kept confidential and your name will not be associated in any way with the research findings. If you choose to participate in this study in order to receive research or extra credit for a Communication Studies course, you will be required to provide your name at the end of the last survey. Your name will be kept separate from your survey responses in separate locked cabinet drawers. If you are participating in this study for extra credit, the researcher will report your name to Dr. Jordan Soliz, the Communication Studies Institutional Review Board department representative. Dr. Soliz will inform your instructor or professor that you have participated in department research for research or extra credit, but in order to protect your privacy, he will not disclose the study in which you participated.

Risks: In this study, there is a risk of slight emotional distress and discomfort to participants. There is a chance that you may feel uncomfortable talking or listening about life events with your mother/daughter. For daughters discussing their difficult life events, risks include feeling uncomfortable or embarrassed discussing difficult events of a personal nature with your mother and/or experiencing distress thinking about the difficult experience. For mothers, depending on the nature of the story, you may feel uncomfortable listening to the difficult story, which could put your relationship at risk. Other risks include feeling uncomfortable or embarrassed listening to your daughter's story and/or feeling distressed by the difficult experience. The researcher has taken steps to eliminate these risks for both participants. Namely, the daughter will choose the story she will tell, and so she may decide on a story that she will feel comfortable telling to her mother. The mother or the daughter may choose to stop participation at any time.

If you suffer any emotional or mental distress as a result of your participation, please contact the University of Nebraska's Counseling and Psychological Services at 402-472-2351, or other comparable services. Treatment is available to students and non-students on a sliding fee scale, and it is the responsibility of each participant to pay for treatment if they choose to seek it out. The researchers will not be held liable for treatment expenses incurred.

Questions: As a participant in this study, you have the right to ask questions and have those questions answered at any time. If you would like additional information concerning this study, please feel free to contact the researcher at the below phone number, mail address, or email address. If you have any questions about your rights as a research participant that have not been answered by the investigator or if you would like to report any concerns about the study, you may contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965.

Withdrawal: If you feel uncomfortable at any time, you are free to omit answering questions and/or withdraw from the study as your participation is completely voluntary. Withdrawal from the study will not adversely affect your relationship with the investigator, the Department of Communication Studies, or the University of Nebraska. Your decision will not result in any loss of benefits for which you are otherwise entitled.

Compensation: If you are currently enrolled in a Communication Studies course, you may receive research credit or extra credit points for your full participation in this study. You must complete all parts of the study to earn the extra credit. Extra credit or research credit compensation is at the discretion of your instructor or professor. At the discretion of your instructor, Communication Studies students may receive up to three research participation credits (i.e., the equivalent of completing three studies or three non-research opportunities). Should you choose not to participate in this study, you will be afforded other opportunities to earn points by your instructor or professor, such as participation in other research studies or completion of other reading or writing assignments. All research opportunities are posted on the Communication Studies Department website which is regularly updated throughout the semester. Further, the non-research opportunities provided to you will take approximately the same amount of time and effort as participating in research studies. Upon completion of the study, those participants who do NOT qualify for extra credit (daughters and/or mothers) will be entered into a raffle to win a \$25 gift certificate to several restaurants/coffee shops in Lincoln. One person per every 25 eligible participants will win a gift card.

Assent: Participants who are 18 years old must receive parental permission to participate in this study. If your daughter is **18 years old** and you consent to her participation, please type her name in the space below.

Consent: You are voluntarily making a decision whether or not to participate in this research study. Checking "I agree" below certifies that you have decided to participate having read and understood the information presented. You may print a copy of this form if you choose. Thank you for your participation in this research study.

___ I agree

___ Participant # *(emailed to you with the link to this survey)*

Haley Kranstuber
PhD Candidate
University of Nebraska-Lincoln
Department of Communication Studies
415 Oldfather Hall
Lincoln, NE 68588-0329
402.472.3348
haley.kranstuber@huskers.unl.edu

Dr. Jody Koenig Kellas
Associate Professor
University of Nebraska-Lincoln
Department of Communication Studies
428 Oldfather Hall
Lincoln, NE 68588-0329
402.472.2079
jkellas2@unl.edu

Appendix D: Questionnaire

Daughter Well-Being and Mother Social Support Measures

Appendix Table of Contents

Pre-Interaction

1. Difficult Experience: Life Experience Questionnaire (Lyubomirsky et al., 2006).

Daughter Time 1

1. Difficult Experience Story (adapted from Koenig Kellas & Trees, 2009)
2. Mental Health Symptoms: Mental and Physical Health Scale (Dornbusch et al., 1991)
3. Positive and Negative Affect: Positive and Negative Affect Schedule (Watson et al., 1988)

Mother-Daughter Interaction (Lab)

1. Mother Empathy: Interpersonal Reactivity Index (Davis, 1983)
2. Mother Perspective-taking: Communicated Perspective-taking Scale (Koenig Kellas et al., 2012)
3. Mother Face Threat: Perceived Face Threat Measure (Cupach & Carson, 2002)
4. Mother Emotional Support: Communication-Based Emotional Support Scale (Weber & Patterson, 1996)
5. Mental Health Symptoms: Mental and Physical Health Scale (Dornbusch et al., 1991)
6. Positive and Negative Affect: Positive and Negative Affect Schedule (Watson et al., 1988)

Daughter Times 3 and 4 (same measures as Time 1)

1. Difficult Experience Story (adapted from Koenig Kellas & Trees, 2009)
2. Mental Health Symptoms: Mental and Physical Health Scale (Dornbusch et al., 1991)
3. Positive and Negative Affect: Positive and Negative Affect Schedule (Watson et al., 1988)

Difficult Experience: Life Experience Questionnaire

Directions: In the spaces below, please list three difficult life experiences that have occurred in your lifetime and then answer each of the questions that follow the spaces. Keep in mind that you will be telling your mother the story of one of these experiences so you should only write down those events that you would be comfortable talking about with her.

Difficult Life Experience 1

--

1a. How upsetting is this experience for you currently?

Not upsetting	Extremely upsetting
1 2 3 4 5 6 7 8 9 10	

1b. How recent was this experience? ____ Years ____ Months

1c. How significant is this experience in your life?

Not at all significant	Very significant
1 2 3 4 5 6 7 8 9 10	

1d. How much time have you spent talking out loud to others about this experience?

None	A lot of time
1 2 3 4 5 6 7 8 9 10	

1e. Is this experience resolvable (meaning, do you think the experience can easily be resolved by you or is it out of your control?)

Not easily resolvable	Very resolvable
1 2 3 4 5 6 7 8 9 10	

Difficult Life Experience 2

--

2a. How upsetting is this experience for you currently?

Not upsetting

Extremely upsetting

1 2 3 4 5 6 7 8 9 10

2b. How recent was this experience? ____ Years ____ Months

2c. How significant is this experience in your life?

Not at all significant

Very significant

1 2 3 4 5 6 7 8 9 10

2d. How much time have you spent talking out loud to others about this experience?

None

A lot of time

1 2 3 4 5 6 7 8 9 10

2e. Is this experience resolvable (meaning, do you think the experience can easily be resolved by you or is it out of your control?)

Not easily resolvable

Very resolvable

1 2 3 4 5 6 7 8 9 10

Difficult Life Experience 3

--

3a. How upsetting is this experience for you currently?

Not upsetting

Extremely upsetting

1 2 3 4 5 6 7 8 9 10

3b. How recent was this experience? ____ Years ____ Months

3c. How significant is this experience in your life?

Not at all significant

Very significant

1 2 3 4 5 6 7 8 9 10

3d. How much time have you spent talking out loud to others about this experience?

None

A lot of time

1 2 3 4 5 6 7 8 9 10

3e. Is this experience resolvable (meaning, do you think the experience can easily be resolved by you or is it out of your control?)

Not easily resolvable

Very resolvable

1 2 3 4 5 6 7 8 9 10

Daughter Difficult Experience Story

Directions: Please think of a time recently in which your family had a stressful or difficult experience. This should be a specific story of a stressful event that you can tell in this survey and to your mother, later in the week. Please include any relevant information including what led up to the story, what happened, and what happened as a result.

Please write out the story of a difficult experience that is currently bothering you. Be as complete as possible when writing out your story, including relevant “characters,” settings, and plotlines, just as you normally would when telling this story. Be as complete as possible when writing out your story.

Mental Health Symptoms: Mental and Physical Health Scale

Directions: The questions in this scale ask you about your feelings and thoughts during the last week. In each case, you will be asked to indicate *how often* you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer each question fairly quickly. That is, do not try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate. All questions are asking you how you have felt during the LAST WEEK.

Never	Almost never	Sometimes	Fairly often	Very often	
1	2	3	4	5	
How often have you been upset because of something that happened unexpectedly?	1	2	3	4	5
How often have you felt that you were unable to control the important things in your life?	1	2	3	4	5
How often have you felt nervous and “stressed”?	1	2	3	4	5
How often have you dealt successfully with irritating life hassles?	1	2	3	4	5
How often have you felt that you were effectively coping with important changes that were occurring in your life?	1	2	3	4	5
How often have you felt confident about your ability to handle your personal problems?	1	2	3	4	5
How often have you felt that things were going your way?	1	2	3	4	5
How often have you found that you could not cope with all the things that you had to do?	1	2	3	4	5
How often have you been able to control irritations in your life?	1	2	3	4	5
How often have you felt that you were on top of things?	1	2	3	4	5
How often have you been angered because of things that happened that were outside of your control?	1	2	3	4	5
How often have you found yourself thinking about things that you have to accomplish?	1	2	3	4	5
How often have you been able to control the way you spend your time?	1	2	3	4	5
How often you have felt difficulties were piling up so high that you could not overcome them?	1	2	3	4	5

Positive and Negative Affect: Positive and Negative Affect Measure (PANAS)

In this section, you are presented with a number of words that describe different feelings and emotions that you may feel as a result of the **specific difficult story you have told**. Please read each item and respond as accurately and honestly as possible by circling the appropriate number next to the word that best reflects how much you feel each emotion in relation to your difficult story **currently**.

	Not at all	A Little	Moderately	Quite a Bit	Extremely
1) Interested	1	2	3	4	5
2) Distressed	1	2	3	4	5
3) Excited	1	2	3	4	5
4) Upset	1	2	3	4	5
5) Strong	1	2	3	4	5
6) Guilty	1	2	3	4	5
7) Scared	1	2	3	4	5
8) Hostile	1	2	3	4	5
9) Enthusiastic	1	2	3	4	5
10) Proud	1	2	3	4	5
11) Irritable	1	2	3	4	5
12) Alert	1	2	3	4	5
13) Ashamed	1	2	3	4	5
14) Inspired	1	2	3	4	5
15) Nervous	1	2	3	4	5
16) Determined	1	2	3	4	5
17) Attentive	1	2	3	4	5
18) Jittery	1	2	3	4	5
19) Active	1	2	3	4	5
20) Afraid	1	2	3	4	5

Mother Empathy: Interpersonal Reactivity Index

Directions: The following statements inquire about your thoughts and feelings about your mother in a variety of situations. For each item, indicate how well it described your interaction with your mother during the current study. Please read each item carefully before responding and answer as honestly as you can.

Note: I have altered this scale to an other-report measure. Only including Empathic Concern and Perspective-Taking scales.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

The following statements describe my mother:

- 1) My mother had tender, concerned feelings for me.
- 2) My mother didn't feel very sorry for me when I was describing my problems. (-)
- 3) When my mother seemed to feel kind of protective towards me when I was describing my experience.
- 4) My misfortunes did not disturb my mother a great deal. (-)
- 5) My mother didn't feel very much pity for me when I was describing my experience. (-)
- 6) My mother was quite touched by things that we talked about.
- 7) Based on this conversation, my mother would describe herself as a pretty soft-hearted person.

(-) denotes item to be scored in reverse fashion

Mother Perspective-Taking: Communicated Perspective-Taking Scale

Directions: Based on your interactions with your mother over the last study session, please rate the degree to which you think **your mother** engaged in the following behaviors. The scale ranges from 1 (strongly disagree) to 5 (strongly agree).

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

- 1) My mother was attentive to me during our conversation.
- 2) My mother listened to me when I told my story.
- 3) My mother was disengaged (didn't pay attention) during our interaction.
- 4) My mother gave me plenty of space to talk about my problem.
- 5) My mother asked me questions at appropriate times during our interaction.
- 6) My mother and I were in sync during our conversation.
- 7) My conversation with my mother felt disjointed.
- 8) My mother contributed relevant information to the conversation.
- 9) My mother helped me say what I wanted to say.
- 10) My mother was self-centered during our conversation
- 11) My mother was respectful of me when I talked about my problem.
- 12) My mother used humor during our interaction.
- 13) My mother let me tell my version of the story.
- 14) My mother disagreed with me during our interaction.
- 15) My mother was kind during our interaction.
- 16) My mother interrupted me when I was talking.
- 17) My mother seemed to understand my feelings.
- 18) My mother did a good job of acknowledging my perspective.
- 19) My mother was sarcastic during our interaction.

Mother Face Threat: Perceived Face Threat Measure

Directions: Based on your interactions with your mother, assess **your mother** on the following behaviors. The scale ranges from 1 (strongly disagree) to 5 (strongly agree).

Note: (“+” indicates positive face threat; “-” indicates negative face threat.)

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

During the interactions, my mother...

- 1) Was polite (+)
- 2) Was rude (+)
- 3) Was insensitive (+)
- 4) Showed disrespect toward me (+)
- 5) Was justified in his or her behavior (+)
- 6) Was hostile (+)
- 7) Strengthened the relationship between us (+)
- 8) Showed contempt toward me (+)
- 9) Damaged the relationship between us (+)
- 10) Was tactful (+)
- 11) Constrained my choices (-)
- 12) Took away some of my independence (-)
- 13) Made me look bad (-)
- 14) Invaded my privacy (-)

**Mother Emotional Support: Communication Based Emotional Support Scale
(CBESS)**

Directions: The following questions are concerned with how you perceive that ***your mother communicated with you in the current situation***. For each statement, respond by circling the number that best represents your agreement with that statement.

Almost Never	Rarely	Occasionally	Often	Almost Always
1	2	3	4	5

- 1) She helped me work through my thoughts and feelings.
- 2) My mother did things that she knew would upset me.
- 3) She patiently and sensitively listened to me "let off steam" about an outside problem that I am having.
- 4) When I told my mother about a problem that I am having, she didn't seem to be paying attention.
- 5) She helped me cope with my problems.
- 6) She avoided the conversation about my difficult event.
- 7) She was a good listener.
- 8) When I told my mother about a problem that I was having, she responded with, "If you think that is bad, listen to this..."
- 9) She did not listen to my problems.
- 10) She said and did supportive things for me during our conversation.
- 11) When I wanted to talk to my mother about what is bothering me, she seemed to want to do something else.
- 12) She showed genuine concern for my problems.
- 13) When I talked to my mother about a problem that I had, she told me that I was overreacting.
- 14) She gave me good advice when I told her about my difficult experience.
- 15) My mother thought that I was mad at her and/or got defensive when I told her about my problems.
- 16) She made it very easy to discuss my personal feelings.
- 17) She told me what I should do even when I didn't ask for advice.
- 18) My mother listened to my side of the story even if she thought that I am wrong.
- 19) She didn't understand that I just need to "blow off steam."
- 20) She made an effort to make me feel better.

Appendix E: Procedure Script

Procedure Script for Mother-Daughter Interaction

Mother-Daughter Conversations about Difficulty

Welcome and Informed Consent

1. Thank you so much for coming today. As you know, this study lasts a total of four weeks. We are going to meet once this week and then I will email you (the daughter) a link to a survey to take in two days and again in three weeks. Today, you will be engaging in interaction with each other and you (the daughter) will complete an on-line survey as well.
2. Two days ago, I sent you both an email with a link to an informed consent form, which you indicated that you read and then provided your informed consent to participate in the study. I have the form here if you would like to review it again. I would like to remind you of a few details that were included in the form. In this study, there is a risk of slight emotional distress and discomfort to participants. There is a chance that you may feel uncomfortable talking and listening about life events with each other. You (the daughter) will be asked to talk about a story of a difficult life experience. Risks may include feeling uncomfortable or embarrassed discussing difficult events of a personal nature with your friend and/or experiencing distress thinking about a difficult experience. Depending on the nature of the story, your mother may feel uncomfortable talking about the difficult experience with you, which could put your relationship at risk. We have taken steps to eliminate these risks for you. Namely, you will choose the story you tell, and so you may decide on a story that you will feel comfortable telling to your mom.
3. For you (the mother), risks include feeling uncomfortable or embarrassed talking about your daughter's story with her and/or feeling distressed by the difficult experience. Participants may choose to stop their participation at any time. Again, keep in mind that you do not have to answer any questions or do anything that you do not want to do and you may withdraw from the study at any time.
4. Do you have any questions about informed consent?

Telling of and Listening to the Story

5. Now, you (*motion to the Daughter*) are going to talk about the difficult experience you wrote about two days ago in the survey I emailed to you. What was your story about? (*Let her answer so you can get a sense of the story topic.*) (*Give the Daughter the paper with the following directions on it and read them to her.*)

As you talk about your difficult experience, I would like for you to talk about your very deepest thoughts and feelings about the experience you selected. As you tell your story, I would like you to really let go and explore your very deepest emotions and thoughts. You might tie your experience to your relationships with others, including your parents, romantic partners, friends or relatives, to your past, your present, or your future, or to who you have been, who you would like to be, or who you are now.

Remember that you do not need to reveal anything you do not feel comfortable sharing. While the video recordings will only be shared with the researchers of the study, keep in mind that there is the risk that you and/or your mother may feel uncomfortable or embarrassed talking about your story about your difficult experience. There is also the risk of revealing private information to your mother. Either of you may stop your participation at any time. (*Give the Mother the paper with the following directions on it and read them to her*).

As your daughter talks about her difficult experience, I would like you to listen and interact as you normally would if she were to tell you a story such as this. In other words, there is no right or wrong way to interact: you are free to talk, ask questions, interject, or keep quiet, etc. The point is for you to interact how you normally would if she was telling this story in a place where you typically get together.

I am going to go into the back room in order to give you some space and in order to start the cameras. I will knock on the window when I am ready for you to begin interacting. What questions do you have for me? (*Go to back room and press record. Knock on the window and make sure they begin their interaction*).

6. (*Participants converse about the daughter's difficult experience. Stop them at 10 minutes by knocking on the window.*)

Completion of Outcome Measures

7. Now that you are done talking about the experience, I am going to have you (the Daughter) complete an on-line survey. _____ (Mother's name), you can wait here while she's taking this survey. Your (*motion to the Daughter*) survey is set up on the computer in the back room (see Appendix E—mother empathy, facework, perspective-taking, and emotional support; daughter well-being and negative affect).

Closing

8. That completes our session for the day. Thank you so much for participating. Please remember that I will be emailing you (the Daughter) in two days with another survey to complete within 24 hours, and then again in three weeks on _____. There will be a space on that last survey for you to indicate your instructor's name and the course you are in so that you receive extra credit for your participation. If either or both of you are not receiving extra credit for participating, you will be put into a drawing to win a gift certificate for a local restaurant. What questions can I answer for you?

Daughter Instructions:

As you talk about your difficult experience, I would like for you to talk about your very deepest thoughts and feelings about the experience you selected. As you tell your story, I would like you to really let go and explore your very deepest emotions and thoughts. You might tie your experience to your relationships with others, including your parents, romantic partners, friends or relatives, to your past, your present, or your future, or to who you have been, who you would like to be, or who you are now.

Mother Instructions:

As your daughter talks about her difficult experience, I would like you to listen and interact as you normally would if she were to tell you a story such as this. In other words, there is no right or wrong way to interact: you are free to talk, ask questions, interject, or keep quiet, etc. The point is for you to interact how you normally would if she was telling this story in a place where you typically get together.

Narrative Sense-Making of Difficult Experiences

Rater Training Manual

Haley Kranstuber
University of Nebraska-Lincoln

Updated 3.1.12

Defining Narrative Sense-Making

People are natural storytellers who narrate their experiences in order to make sense of their lives. Narrative theorists assert that humans bring together their thoughts and emotions in story form, including plot, sequence, characters and agency. Such narrative structuring can help facilitate narrative sense-making, or working to understand one's experiences through the creation and organization of narratives (Bochner, 2002; Koenig Kellas, 2008). Storytelling "helps individuals organize lived events – many of which are messy, multivocal, complicated or confusing – into more manageable packages that make sense of the context of their lives and relationships" (Koenig Kellas, 2008, p. 242).

For the present codebook, we will focus on three indicators of narrative sense-making: narrative coherence, tone, and frame described in detail below. We will be analyzing data from a project on daughters' stories of difficulty, which they wrote out in an online survey and told to their mothers in the Social Interaction Lab. We will be analyzing the written data in particular. Detailed explanations and examples of the elements of the coding scheme, and practice stories are provided in this codebook.

Narrative Coherence

Coherent stories are those that make sense or “hang together” in terms of structure, characters, plot, and setting. Stories that are created in coherent ways facilitate and represent sense-making and coping. McAdams notes that more coherent stories “provides and reflects a sense of meaning, purpose, and connectedness to the world.” A well-formed or coherent narrative contains and represents a sophisticated level of meaning-making, drawing meaning from and relationships between the events, characters and plotlines of a story (Koenig Kellas & Manusov, 2003; McAdams, 1993; McLean & Pratt, 2006; Wigren, 1994).

Please rate each story on the following five coherence characteristics, on the following scale:^a

1	2	3	4	5	6	7
Very Low	Low	Somewhat Low	Neutral	Somewhat High	High	Very High

Orientation

The narrative introduces main characters and locates the story in a specific temporal, social, and personal context. The narrative describes the habitual circumstances serve as the parameters for the action of the story.

Structure

The narrative displays the structural elements of an episode system. Thus, the narrative has at least one of the following: an initiating event; an internal response to this event (e.g., a goal, plan, thought, feeling); an attempt (e.g., to reach a goal, carry out a plan, remedy a crisis, resolve a state of emotional disequilibrium); and a consequence. These elements are presented in a causally and temporally logical way (e.g., the initiating event precedes the response, which in turn precedes the attempt).

Affect

The narrative reveals something about the narrator, or about what the events described therein mean to the narrator; the narrative makes an evaluative point. The narrative uses emotion in order to make this evaluative point, employing explicit statements of feeling in order to create an affective tone or signify emotional meaning. Thus, the narrative uses tension, drama, humor, or pathos to communicate and emphasize the evaluative point.

Integration

The narrative communicates information in an integrated manner, expressing the meaning of the experiences described within the context of the larger life story. Discrepancies, contradictions, and inconsistencies are eventually resolved, and the various narrative elements are synthesized into a unified story. Although complexity, ambiguity, and differentiation may be used to indicate suspense, conflict, or growth, the narrative ultimately reconciles these disparate story elements with one another.

^a Scale adapted from Baerger & McAdams (1999) and LeClair-Underberg (2008).

P# _____ Story # _____

Narrative Coherence Rating Scale

For the current dataset, please rate each story based on the following five coherence characteristics, on a seven-point Likert-type scale (1 = very low to 7 = very high).

1	2	3	4	5	6	7
Very Low	Low	Somewhat Low	Neutral	Somewhat High	High	Very High

1. Orientation

Very low	1	2	3	4	5	6	7	Very high
----------	---	---	---	---	---	---	---	-----------

2. Structure

Very low	1	2	3	4	5	6	7	Very high
----------	---	---	---	---	---	---	---	-----------

3. Affect

Very low	1	2	3	4	5	6	7	Very high
----------	---	---	---	---	---	---	---	-----------

4. Integration

Very low	1	2	3	4	5	6	7	Very high
----------	---	---	---	---	---	---	---	-----------

Narrative Coherence Rating Examples^a

P# 49D: Story 1

High Coherence

I have had a really good friend since i was a little girl. We did everything together, especially dance. It was a huge part of both of our lives and never did it without each other. In that case, we never did anything without each other. It was just last year, when it all fell apart. My friend Hannah was a year older than me so she went off to college a year before me. It was really hard for me, because we were always together. We started to grow apart and didn't talk much. She met new friends and started her new beginning and chapter of her life. I was left alone and got really sad. This last summer we talked a little but again didn't hang much. I always tried talking to her and asking to hang out but she never gave me the chance. I still today think about her because we were sisters. We laughed and cried together, and were there for the other. Its still really hard for me today to think where the relationship is. I want to fix it, but i just don't know what direction to go in.

1. Orientation (7/7) – *describes her life with her friend in their childhood; didn't orient to her name or childhood as a whole, but generally oriented to two characters*
2. Sequence (7/7)
 - a. Initiating event – *Hillary moving to college and growing apart from their friendship*
 - b. Response – *Got really sad*
 - c. Attempt – *Tried to talk and hang out this summer*
 - d. Consequence – *Still not quite sure what direction to go with the situation*
3. Affect – *established drama ("It was just last year, when it all fell apart") and evaluated affect ("I was left alone and got really sad") (7/7)*
4. Integration – *still think about her because we were sisters" shows that she's still grappling with the situation and the way it fits into her life story; hasn't quite made a lesson yet but mentions her attempt to do so (6/7)*

P# 41D: Story 2

Moderate Coherence

It was Valentine's Day when I was riding home with some other people when our car got pulled over. The reason for pulling us over was because the rear license plates were not visible. The driver, who was sober, followed all the proper procedures that was asked by the police officer. After the driver had been questioned, the police officer said the car had the smell of alcohol. He then each pulled each person out of the car individually and asked a series of questions then breathalized. When it was my turn, I followed all the directions. It turned up with a very small number, however I still had been drinking as a minor. The police officer then asked me to call one of my relatives to inform them of what had happened. I called my mom and explained to her the situation. After my call with my mom and talking to the officer, I was directed to go back to my dorm.

1. Orientation – *little orientation to the context or characters (other than Valentine's Day and riding home with "some other people") (2/7)*

^a All identifying information has been changed in order to maintain participant confidentiality..

2. Sequence (6/7)
 - a. Initiation – *getting pulled over and having administered breathalyzer; asking to call one of her relatives*
 - b. Response – *no emotional response provided*
 - c. Attempt – *following all the directions; called her mom*
 - d. Consequence – *told to go back to her dorm*
3. Affect – *created a little drama but did not evaluate the situation nor provide any indications of the emotions surrounding the event (2/7)*
4. Integration – *did not evaluate the story in terms of the larger context or life lessons (1/7)*

P# 48D: Story 1

Low Coherence

After going through being hospitalized for an eating disorder, it seems to be very hard to lose the weight I gained. I am not happy with the way I look, or my eating habits. It seems like I have changed for the worse after being hospitalized. I am more angry because I am not happy about my weight. Even though I am not happy with how I look, I am in a never ending cycle of trying to lose weight in an unhealthy way. Even I am smart and I know that what I am doing won't help me reach my goal, I can't stop doing it. My goal is to lose weight in a healthy way by Christmas time. I just hope this past that I have had won't stop me from reaching my goal that I have been attempting to reach for two years now.

1. Orientation – *mentions hospitalization but doesn't ground the reader in the event nor the context in which it took place (2/7)*
2. Sequence (2/7)
 - a. Initiating event – *vaguely, the initiating event is being hospitalized (and its effect on her weight), yet it is difficult to determine the exact event*
 - b. Response – *being angry about her weight*
 - c. Attempt – *her behaviors/attempts to lose weight are unclear ("Even I am smart and know that what I am doing won't help me reach my goal")*
 - d. Consequence – *consequence is jumbled in with the initiating event, talks about "never ending cycle" and her goals to lose weight.*
3. Affect – *affect was clear and she overtly evaluated her emotions regarding the situation, yet it is unclear to what they are directed (6/7)*
4. Integration – *the conclusion is tenuous (referring to "this past") and lessons have not been drawn in respect to the storyteller's life, although she does refer to her "never ending cycle," indicating that this is a recurring problem.(2/7)*

Narrative Tone and Frame

Narrative tone represents the extent to which one believes that the world can be a good place, and that one's place can be more or less secure in the world (McAdams, 1993). Narrators create tone by the way they incorporate positive and negative emotions throughout their story. Stories have a characteristic emotionality or emotional tone that ranges from extremely positive (emphasizing emotions such as happiness and joy) to extremely negative (emphasizing fear and anger) (McAdams, 1993; McAdams et al., 2004).

Rating Scale

Narrative tone is the overall emotionality or emotional “feel” of a narrative. Every story has a characteristic emotional tone, ranging from extreme positivity to extreme negativity. In this study, you will be assessing the narrative tone of each of the stories. You will rate the stories on the following two items, indicating the extent to which they embody each characteristic:

Narrative Tone. Assess the extent to which the storyteller expresses positivity vs. negativity in the story. Those expressing *positive affect* in their story may note that they are cheerful, glad, or content with the experience. They may refer to the “positive aspects” of their difficult experience and use positive affect words (e.g., hopeful, happy, encouraged, peaceful, satisfied). These storytellers express that they feel hopeful, optimistic, or upbeat about the situation.

Stories with *negative affect* will have a depressed, despondent, or gloomy feel. Storytellers may mention that they are troubled or frustrated by the event and that they get upset or emotional about the experience. The storyteller may feel helpless or dejected, expressing little hope that the situation will turn out well. Storytellers may mention other negative feelings such as sadness, anger, anxiety, frustration, hopelessness, unhappiness, discouragement or irritation that accompany their discouraged feeling.

Narrative Frame. Assess the extent to which storytellers conclude their stories in positive (redemptive) or negative (contaminated) ways. This element of narrative tone examines the *progression* of affect throughout the story, from beginning to end of the narrative. Redemptive sequences are those that the storyteller begins the story in a neutral or negative way, and then concludes in a positive manner. *Redemptive sequences* also include those that end of a positive note, especially if the storyteller describes their experience as overall negative or beginning negatively. The overarching quality of redemptive stories are that the storytellers recognize the good that comes out of a difficult or challenging situation.

Contaminated sequences are those that the storyteller begins in a positive or neutral way, and concludes the story in a negative light. Stories that transitioned from positive to negative, or if the story was generally negative will be coded as contaminated. Stories that are neither particularly redemptive nor contaminated will be coded as *ambivalent*. The storyteller does not describe his/her emotions through the story, including a neutral or ambivalent end to the story.

P# _____ Story # _____

Narrative Tone and Frame Rating Scale

Narrative tone is the overall emotionality or emotional “feel” of a narrative. Every story has a characteristics emotional tone, ranging from extreme positivity to extreme negativity. Please rate the stories based on the following two items, indicating the extent to which the stories embody the following characteristics:

- | | | | | | | |
|------------------|---|---|---|---|---|---------------|
| 1. Very Negative | 1 | 2 | 3 | 4 | 5 | Very Positive |
| 2. Contaminated | 1 | | 2 | | 3 | Redemptive |

Narrative Tone and Frame Rating Examples

P# 17D: Story 1

Highlights negative affect, with contaminated sequence

One difficult experience I went through this summer was when my brother married Meghan. He had gotten engaged to her many months before, but I suppose that I just hoped that it wouldn't end up working out. He had known her for years and they had some good times and bad, but what really frustrated me was how she seemed to not show an interest in my family...at all. The few times that she did stay at our house she only complained, and we never got to see Jake during holidays for about 5 years. Obviously that put a strain on our relationship with her. / / The wedding was set to be in her small Nebraska hometown and she wanted to invite everyone she ever knew. Even though that wasn't what my family would have thought of as an ideal wedding, we played the silent role as the groom's family to keep her pleased. My mom tried to help out because she lived in Kansas City, but anything she did wasn't appreciated. Because of that, my mom focused on working on making the rehearsal dinner as nice as possible because that was one of the groom's side's responsibilities. / / Fast forward to the day before the wedding. I learned how the term "Bridezilla" actually can be an understatement. Meghan pouted when she saw us setting up the rehearsal dinner, which we, mind you, spent countless hours picking out the best venue, best food, best music, etc etc (and spent well over what normally is spent on such a dinner). And maybe I am biased, but I felt like everything was absolutely beautiful and deserved at least one measly "thank you." / / That was merely the tip of the iceberg. Really if I had the time and the patience, I could put together a novel just covering that wedding weekend. Basically she didn't show appreciation or friendliness to my mom, and when she talked with me I could tell it was extremely forced (and I could tell that the only reason I was a bridesmaid was because she had to have me as one, not because she really wanted me as one). / / Oh yes, and she forgot details such as putting my grandpa's name in the program. Even though she knew of the mistake well before the wedding day, she felt like it wasn't important enough to reprint that page and it would be best to try to hide it from us. And she felt like we were asking way too much to have 2 tables reserved for my family for the reception, even though there were hundreds of people at the reception (all from her side) and her family got to reserve the best tables. Pretty much it boils down to there were many tiny little things that added together to make one of the most stressful days in my life for some time. / / What made it harder was the fact that I was pretty much losing a brother and my mom was losing a son. Unfortunately, I probably won't see my brother for holidays and he probably won't ever visit simply because Meghan doesn't want him to. I always had hoped that he would end this bad relationship, but now that they are married I guess it is what it is and it is best for me just to get used to it.

P# 22D: Story 1

Highlights slightly negative affect, with a redemptive sequence

When I was 8 years old my dad (Jack) and my mom (Renee) got a divorce. Within a year my dad remarried a woman named Donna who was to become my stepmom. My dad and Donna have a bit of an interesting way of becoming involved with each other and I feel this is part of the reason why they were married within a year of my dad's divorce. Back in 1987 my dad and mom met each other, fell in love and got married all within 4 months. After not even a year they decided that they rushed into things and needed to separate and get a divorce. So my mom and dad split up and my mom left to go to Minnesota to do some modeling and my dad stayed in Nebraska to work. While my dad was in Nebraska he met a woman and started dating her.

When my mom came back from Minnesota to finalize the divorce with my Dad time most have caused them to become fond of each other again because they conceived me. This forced them to cancel the divorce and my dad broke up with the woman he was seeing, not talking to her again and basically breaking her heart. About 9 years go by and my mom and dad tried everything possible to stay together for me but it was a hostile environment and they finally deemed it impossible to be together. They filed for divorce again and my mom moved out with me. While the divorce was being processed my dad ran into the brother of the woman he dated nearly 10 years prior when my mom and dad were filing for divorce the first time. He asked if he could have her contact information and they ended up grabbing lunch to catch up. Things picked back up right where they left began the relationship again. This woman is Donna. Because of their history it was easy for them to fall in love and realize they were supposed to be together. / / Here is where it became problematic. Donna is 10 years younger than my dad and only 18 older than me. I was going through counseling and psychiatric help at this time due to other things in my life that had caused trauma on top of the divorce and the brand new marriage; to say the least, I was not an easy child. Donna had no idea how to mother me since she was so young herself, never really had been around kids other than her siblings and did not show outward affection to anyone because no one showed affection like that in her own family. We immediately clashed. I tried to push my boundaries to see if she would really discipline me. I tried to turn my dad against her. My mom manipulated and filled my head with exaggerations and leading questions to try and get me to say that Donna was talking bad about her or trying to hurt me. It was just a mess. As I got older, it got worse. Donna's temper would flare and I had no one to turn to so I would lash out with emotion. We constantly inadvertently seemed to make my dad choose sides. There was a point where I remember Donna telling me that she could never love because I was not her own. That made me so made and isolated me from her. I knew that she had not dealt with the pain of my dad leaving her the first time and I know she associates that pain with me since I am...in a way...the product of the betrayal and the reason her initial relationship with my dad fell apart. / / Another area where we have had so much trouble is in our way of showing affection. My mom raised me to talk about my feelings, tuck me in, cook me dinner, help me pick up my room, cuddle me when I was sick, etc. and Donna didn't do any of those things. She didn't hug, didn't say I love you, didn't seem to have compassion for when I was sick and always seemed to have this "suck it up" way of parenting about her. Eventually, I learned to not seek affection because I was tired of being turned down and I have realized in my adult life that I have a hard time opening up and being lovely/cuddly with people because I see it as weakness or vulnerability. It's like if I open up I no longer have control over the situation. / / Even though I have just stated many negative things, Donna and I are really beginning to get closer now. Now that I am out of the house we have space and when we do hang out it's because we want to, not because we have to. I can really relate to her better now and I know she can to me as well. We both have grown up so much and it has made me see her in a totally different light. My dad is quite appreciative!

P# 38D: Story 4

Highlights slightly negative affect, with a (slightly) redemptive sequence

I had a bad break up about 10 months or so ago and i dealt with not only my mom not believing what i was telling her but also dealing with a guy that wanted me out of his life but would not let go. The relationship was very controlling and there was no freedom or say on my part. In the end things ended for the better but it took a long time to get over it and fully let go.